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THE

WEEKLY WEATHER REPORT

OF THE

METEOROLOGICAL OFFICE

FOR THE YEAR

1893

(VOL. X.—THIRD SERIES)

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DESCRIPTIVE SUMMARIES OF THE WEATHER FOR EACH DAY;

ALSO

TABULAR SUMMARIES OF TEMPERATURE, RAINFALL, AND BRIGHT SUNSHINE, FOR EACH WEEK,

WITH MONTHLY SUPPLEMENTS AND TWO APPENDICES.

Published by the Authority of the Meteorological Council.

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1894.

WEEKLY WEATHER REPORT.

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VOL. X. No. 1.] *Third Series.* WEEK ENDING SATURDAY, 7TH JANUARY, 1893. [*Price 6d.* [*Annual subscription, post paid*, £1 10s. 0d.

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871-90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty-five years 1866-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90, only. BRIGHT SUNSHINE.—*The Mean values* employed are those for the corresponding periods in the ten years 1881-90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

	DISTRICTS. (See p. 2.)	Observed during the Week. Highest.	Observed during the Week. Lowest.	Averages of Daily Maxima.	Averages of Daily Minima.	Averages of Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 1st, 1893. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	39	2	33·9	22·4	28·4	10 below.	0	− 8	95	+63	0	− 7	95	+ 65
	1. SCOTLAND, EAST	37	−2	32·5	21·0	27·0	10 below.	0	− 7	105	+65	0	− 6	105	+ 64
	2. ENGLAND, N.E.	38	8	33·2	23·2	28·4	10 below.	0	− 7	95	+59	0	− 6	95	+ 58
	3. ENGLAND, EAST	36	8	31·7	20·0	26·1	12 below.	0	− 7	111	+68	0	− 9	111	+ 68
	4. MIDLAND COUNTIES	35	5	30·7	19·6	25·3	12 below.	0	−10	117	+74	0	− 10	117	+ 73
	5. ENGLAND, SOUTH	38	10	31·4	21·3	26·6	13 below.	0	−11	108	+76	0	− 11	108	+ 79
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	41	10	34·5	24·7	29·8	10 below.	0	−10	85	+56	0	− 8	85	+ 55
	7. ENGLAND, N.W.	39	18	33·1	25·2	29·4	10 below.	0	− 9	88	+58	0	− 9	88	+ 58
	8. ENGLAND, S.W.	48	7	36·5	26·3	31·6	10 below.	0	−15	73	+51	0	− 14	73	+ 54
	9. IRELAND, NORTH	41	13	35·7	28·0	32·1	8 below.	0	−18	69	+43	0	− 14	69	+ 46
	10. IRELAND, SOUTH	48	14	39·3	30·2	34·9	7 below.	0	−20	50	+30	0	− 20	50	+ 35
	— CHANNEL ISLANDS	48	20	40·8	30·9	36·1	8 below.	0	−24	41	+32	0	− 23	41	+ 32

Rainfall.

	DISTRICTS. (See p. 2.)	For the Week. Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 1st, 1893. Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.
			10ths of In.	10ths of In.			Ins.	Ins.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	4	2	11 less.	4	− 1	2	− 1·1
	1. SCOTLAND, EAST	5	4	3 less.	5	+ 2	4	− 0·3
	2. ENGLAND, N.E.	5	4	1 less.	5	+ 2	4	− 0·1
	3. ENGLAND, EAST	5	4	1 less.	5	+ 1	4	− 0·1
	4. MIDLAND COUNTIES	3	4	2 less.	3	0	4	− 0·2
	5. ENGLAND, SOUTH	2	2	4 less.	2	− 1	2	− 0·4
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	4	2	11 less.	4	− 1	2	− 1·1
	7. ENGLAND, N.W.	4	2	5 less.	4	0	2	− 0·5
	8. ENGLAND, S.W.	2	3	7 less.	2	− 2	3	− 0·7
	9. IRELAND, NORTH	4	5	3 less.	4	− 1	5	− 0·3
	10. IRELAND, SOUTH	4	15	5 more.	4	0	1·5	+ 0·5
	— CHANNEL ISLANDS	4	9	1 more.	4	− 1	9	+ 0·1

Bright Sunshine.

	DISTRICTS. (See p. 2.)	For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 1st, 1893. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	6	?	13	?	6	+ 1	13	+ 3
	1. SCOTLAND, EAST	3	− 5	7	−12	3	− 7	7	−13
	2. ENGLAND, N.E.	11	+ 1	21	+ 1	11	+ 5	21	+ 9
	3. ENGLAND, EAST	10	− 1	18	− 2	10	0	18	0
	4. MIDLAND COUNTIES	10	+ 2	18	+ 3	10	+ 1	18	+ 2
	5. ENGLAND, SOUTH	12	+ 1	22	+ 3	12	+ 3	22	+ 5
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	9	+ 2	18	+ 5	9	+ 3	18	+ 6
	7. ENGLAND, N.W.	11	+ 4	21	+ 7	11	+ 4	21	+ 8
	8. ENGLAND, S.W.	13	+ 2	24	+ 7	13	+ 2	24	+ 3
	9. IRELAND, NORTH	9	− 1	16	− 1	9	− 1	16	− 4*
	10. IRELAND, SOUTH	8	− 4	15	− 5	8	− 5	15	−10
	— CHANNEL ISLANDS	11	0	20	0	11	− 6	20	−10

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather continued very cold and wintry all over the Kingdom; occasional falls of snow occurred in Great Britain and over the northern parts of Ireland, while in the south of Ireland the conditions, after being fine and dry, became very rainy. Over the inland parts of England some dense fogs were experienced.

Temperature was again very low, the deficit ranging from 7° in Ireland S., and 8° in Ireland N. and the Channel Islands, to 10° in most other districts, to 12° in England E. and the Midland Counties, and to 13° in England S. The highest of the maxima were registered on rather irregular dates, and varied from 48° in the extreme south-western districts to 35° in the Midland Counties. At several of the inland English stations the daily maxima were below 32° throughout the whole period. The lowest of the minima were recorded during the middle part of the week, when the thermometer fell to − 2° in Scotland E. (at Braemar) to + 2° in Scotland N. (at Fort Augustus), to 5° in the Midland Counties, 7° in England S.W., and 8° in England N.E. and E., in most other districts the minima ranged from 10° to 14°, but in England N.W. the lowest reading was 18°, and in the Channel Islands 20°.

Rainfall was more than the mean in Ireland S. and the Channel Islands, but less in all other districts.

Bright Sunshine was rather less than the mean in Ireland and the east of Scotland, but above it in most of the English districts. The percentage of the possible duration ranged from 24 in England S.W. and 22 in England S., to 13 in Scotland N. and 7 in Scotland E.

Barometer and Wind.—Barometric pressure was generally highest in the north-east, and lowest in the south-west, and the winds consequently between North-East and South-East. No definite depressions appeared over us excepting on the 3rd, when a small disturbance passed south-eastwards down our east coasts and caused the wind in the south to blow temporarily from the Westward. Towards the end of the period, however, a larger system approached us from the Atlantic, and by the end of the week had spread over a great portion of our south-western districts, producing strong Easterly winds and gales at many of our south-western and western stations.

* The corresponding value in the report for the week ending December 31st, 1892, should read "+ 2."

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II.—DATA from which the SUMMARY on page 1 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°				Inches	Inches.				
0. SCOTLAND, N.	Sumburgh Head	37	24	34·3	26·7	30·7	− 8·5	0	79	5	0·20	−0·69	*	*	*	*
	Stornoway	37	22	35·6	26·7	31·3	− 7·6	0	75	3	0·07	−1·15	10·1	+ 4·4	22	+10
	Wick	39	12	36·0	23·6	30·1	− 7·8	0	83	6	0·36	−0·16	*	*	*	*
	Lairg ⚓	35	5	31·0	17·0	24·3	−11·9	0	124	4	0·10	−0·72	*	*	*	*
	Glencarron ⚓	36	14	31·2	20·0	25·8	−11·6	0	113	2	0·12	−2·15	*	*	*	*
	Fort Augustus ⚓	38	2	34·3	19·8	27·3	−11·2	0	103	3	0·47	−0·59	2·7	?	6	?
	Fort William ⚓	38	14	34·7	22·8	29·0	−10·5	0	91	3	0·11	−2·09	5·8	?	12	?
1. SCOTLAND, E.	Nairn	36	8	31·9	15·9	24·2	−13·3	0	125	3	0·10	−0·36	*	*	*	*
	Aberdeen	37	12	34·3	24·6	29·6	− 8·3	0	87	7	0·93	+0·35	4·9	− 5·9	10	−12
	Braemar ⚓	32	− 2	30·2	14·6	22·7	−12·0	0	135	6	0·38	−0·30	1·7 †	?†	4†	?†
	Ochtertyre ⚓	37	16	32·1	23·1	27·8	− 8·6	0	99	4	0·31	−0·79	*	*	*	*
	Leith ⚓	37	13	33·7	24·7	29·4	− 9·7	0	88	4	0·19	−0·24	*	*	*	*
	Marchmont ⚓	34	15	32·6	23·3	28·1	− 8·3	0	97	4	0·35	−0·30	4·8	?	10	?
2. ENGLAND, N.E.	Alnwick Castle	36	11	33·3	24·4	29·0	− 8·8	0	91	5	0·43	−0·12	*	*	*	*
	Durham	36	11	31·5	21·4	26·7	−10·3	0	107	6	0·40	−0·14	6·9	− 2·9	14	− 4
	Shields	38	18	35·1	23·9	29·7	− 8·8	0	86	5	0·22	−0·24	*	*	*	*
	Scarborough ⚓	37	10	32·0	22·9	27·6	−11·1	0	101	6	0·82	+0·33	*	*	*	*
	York	35	8	32·7	19·4	26·3	−11·2	0	110	4	0·39	−0·05				
	Spurn Head	36	25	34·6	27·4	31·1	− 7·3	0	76	4	0·27	−0·08	*	*	*	*
3. ENGLAND, E.	Hillington ⚓	36	8	32·0	19·4	26·0	−11·2	0	112	4	0·35	−0·15	8·5	− 0·7	16	− 1
	Yarmouth	35	20	32·4	24·3	28·5	− 9·3	0	95	5	0·46	−0·04	*	*	*	*
	Geldeston	35	13	32·6	19·9	26·5	−11·7	0	109	5	0·47	+0·07	8·7	− 2·7	16	− 4
	Cambridge	32	10	30·9	16·9	24·2	−13·3	0	125	5	0·45	+0·10	8·8	− 1·3	16	− 2
	Rothamsted	33	15	30·6	19·5	25·3	−12·0	0	117	4	0·18	−0·40	13·8	?	25	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	33	9	31·7	19·9	26·0	−11·3	0	112	3	0·37	−0·10	*	*	*	*
	Loughborough	33	10	29·9	18·3	24·3	−13·5	0	124	4	0·32	−0·14	*	*	*	*
	Stamford (Ketton Hall)	32	5	30·0	16·4	23·5	−13·8	0	130	4	0·48	0·00	*	*	*	*
	Cheadle ⚓	34	18	30·3	21·9	26·3	−10·3	0	110	5	0·63	−0·02	*	*	*	*
	Churchstoke ⚓	32	16	30·5	19·7	25·3	−12·7	0	117	4	0·51	−0·17	9·3	0·0	18	0
	Hereford ⚓	35	13	31·4	20·4	26·1	−12·5	0	111	3	0·35	−0·22	*	*	*	*
	Cirencester	33	13	30·4	19·9	25·4	−12·2	0	116	1	0·18	−0·22	11·0	+ 1·8	20	+ 3
	Oxford	32	13	31·1	19·9	25·7	−12·7	0	114	1	0·20	−0·20	12·0	+ 3·5	22	+ 6
5. ENGLAND, S.	London	34	15	29·6	20·4	25·2	−14·0	0	118	3	0·05	−0·44	2·2 †	− 3·1†	4†	− 4†
	North Foreland	35	19	32·1	23·4	27·9	−11·4	0	99	3	0·32	?	*	*	*	*
	Strathfield Turgiss ⚓	33	10	26·8	16·6	21·9	−16·1	0	141	3	0·18	−0·35	*	*	*	*
	Dungeness	35	11	31·4	17·4	24·7	−15·4	0	121	1	0·05	−0·56	*	*	*	*
	Hastings (St. Leonards)	37	19	32·3	24·0	28·3	−11·8	0	96	3	0·01	−0·66	19·8	+ 7·2	36	+14
	Southampton	36	18	33·3	22·3	28·0	−12·0	0	98	2	0·14	−0·63	10·0	0·0	18	0
	Hurst Castle	38	20	34·0	24·6	29·5	−11·3	0	88	2	0·22	−0·43	*	*	*	*
	Stowell ⚓	35	15	31·9	21·5	27·0	−11·6	0	105	2	0·15	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	41	20	36·8	24·9	31·1	− 9·0	0	76	4	0·21	−1·86	*	*	*	*
	Glasgow	35	17	33·0	24·9	29·1	− 9·3	0	90	6	0·31	−0·63	4·4	+ 0·2	9	+ 1
	Ardrossan	39	21	34·4	24·3	29·6	−11·7	0	87	4	0·11	−0·81	*	*	*	*
	Glenlee ⚓	36	10	31·8	20·1	26·2	−11·2	0	111	2	0·09	−1·57	*	*	*	*
	Douglas (Isle of Man)	40	24	36·5	29·5	33·1	− 7·7	0	62	4	0·31	−0·74	13·3	+ 4·3	26	+ 9
7. ENGLAND, N.W.	Newton Reigny	33	18	30·9	22·5	26·9	−10·9	0	106	3	0·12	−0·86	14·1	+ 7·6	27	+15
	Stonyhurst	37	21	33·4	24·4	29·1	− 9·5	0	90	2	0·05	−0·65	12·3	+ 5·9	24	+12
	Blackpool ⚓	33	18	31·7	23·0	27·5	−10·3	0	102	4	0·31	−0·47	2·3 †	?	4†	?
	Manchester	36	18	32·6	24·0	28·5	−11·3	0	95	5	0·41	−0·11	*	*	*	*
	Liverpool Obsy. (Bidston)	38	25	34·7	27·8	31·4	−10·2	0	74	5	0·30	−0·38	? 14·6	+ 7·6	? 28	+15
	Llandudno ⚓	39	29	35·4	29·7	32·7	− 9·3	0	65	4	0·19	−0·61	*	*	*	*
	Holyhead	35	7	32·7	17·7	25·5	−14·8	0	116	3	0·25	−0·97	*	*	*	*
8. ENGLAND, S.W.	Llandovery	39	24	36·9	30·3	33·7	− 9·4	0	58	3	0·74	−0·14	15·0	+ 4·6	28	+ 8
	Pembroke	38	15	33·6	23·6	28·8	−11·1	0	92	1	? 0·03	? −1·08	*	*	*	*
	Arlington (N. Devon)	38	11	34·4	22·0	28·5	−11·5	0	95	2	0·12	−0·66	19·3	+11·5	35	+21
	Cullompton ⚓	44	26	40·0	33·4	36·8	− 7·3	0	36	3	0·56	−0·68	7·0	− 3·8	13	− 6
	Falmouth	48	18	39·5	27·5	33·7	− 8·4	0	58	2	0·17	−0·74	11·6	+ 1·9	21	+ 3
	Plymouth	42	22	38·4	29·3	34·0	− 8·2	0	56	2	0·17	−0·59	*	*	*	*
	Prawle Point	39	30	37·3	32·1	34·8	− 5·3	0	50	4	0·27	?	*	*	*	*
9. IRELAND, N.	Malin Head	38	22	35·8	27·7	31·9	− 8·2	0	71	4	0·61	−0·31	*	*	*	*
	Londonderry	35	15	33·1	25·1	29·3	− 9·4	0	89	3	0·88	+0·08	*	*	*	*
	Edenfel (Omagh)	39	24	37·9	30·6	34·5	− 7·6	0	53	4	0·26	−0·74	*	*	*	*
	Mullaghmore	40	25	38·0	30·7	34·5	− 8·7	0	53	4	0·44	?	*	*	*	*
	Belmullet	37	13	34·9	24·7	30·0	− 9·4	0	84	4	0·48	−0·32	6·7	− 2·5	13	− 4
	Markree Castle	38	16	35·2	25·0	30·3	− 7·9	0	82	3	0·94	−0·06	*	*	*	*
	Brookeborough	38	21	35·4	27·0	31·4	− 7·4	0	74	4	0·38	−0·27	9·0	− 0·2	17	0
	Armagh	41	28	37·6	31·6	34·7	− 5·8	0	51	4	0·53	−0·14	*	*	*	*
	Donaghadee	36	16	32·4	25·9	29·3	− 9·4	0	89	4	0·27	−0·43	*	*	*	*
	Edgeworthstown	39	20	36·7	29·5	33·2	− 8·4	0	62	5	0·62	+0·12	7·5	− 4·0	14	− 7
10. IRELAND, S.	Dublin	40	15	35·7	24·6	30·4	− 9·3	0	81	4	0·53	−0·17	9·7	− 0·6	18	− 1
	Parsonstown	40	14	36·0	24·7	30·6	−10·4	0	81	4	1·46	+0·68	*	*	*	*
	Kilkenny	42	17	37·6	28·6	33·3	− 9·2	0	61	4	2·35	+1·35	*	*	*	*
	Waterford	46	26	43·4	35·4	39·5	− 4·1	4	25	4	3·40	+2·19	*	*	*	*
	Roche's Point	48	29	44·9	37·4	41·3	− 3·8	8	19	4	1·12	−0·37	7·8	− 3·9	14	− 7
	Valencia	46	23	43·5	33·4	38·7	− 4·6	4	33	4	0·56	?	*	*	*	*
	Killarney	42	19	? 36·9	? 27·6	? 32·4	?− 9·6	0	? 67	3	1·53	?	*	*	*	*
	Foynes															
CHANNEL ISLANDS	Scilly (St. Mary's)	48	30	44·0	36·0	40·2	− 6·0	6	24	4	1·58	+0·70	*	*	*	*
	Jersey	42	20	37·6	25·7	31·9	−10·8	0	71	4	0·23	−0·55	14·3	+ 0·2	25	+ 1

Stations marked ⚓ are in connection with the Royal Meteorological Society, and those marked ⚓ with the Scottish Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

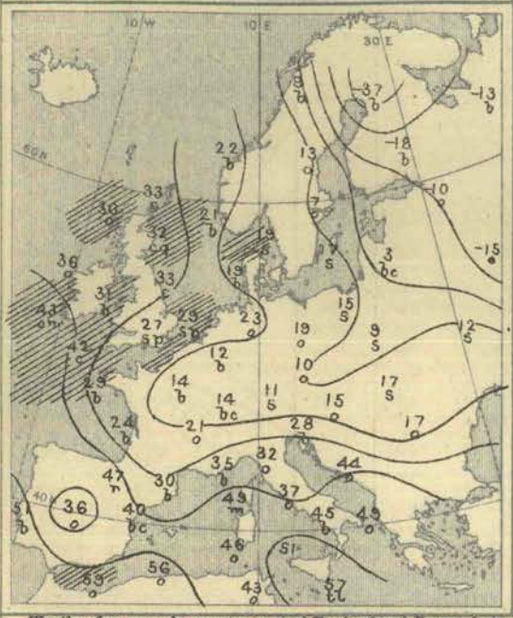
† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

Note.—It will be observed that Bright Sunshine values are now reported from Manchester.

III.—SUMMARY OF WEATHER OVER EUROPE.

Sunday, 1st January.

Temperature and Weather. — 8 a.m.

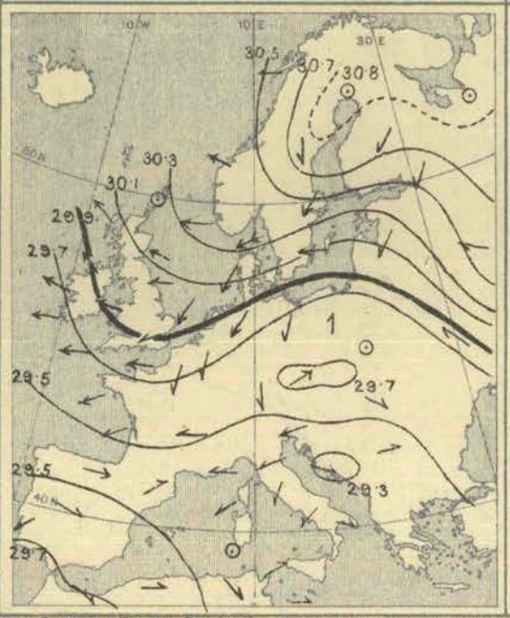


Weather fine over the greater part of England and France, but snow showers falling in London and at Yarmouth; dull in Ireland and Scotland. Fine over northern Russia and the west of Norway, as well as in some parts of Spain and Italy; dull over all the more central countries, with snow in many places. Rain falling at Bjarritz and Bilbao, and a thunderstorm reported at Malta. Snow showers falling during day in many parts of Great Britain, and considerable quantities at several of the Continental stations. Violent thunderstorm occurring at Algiers.

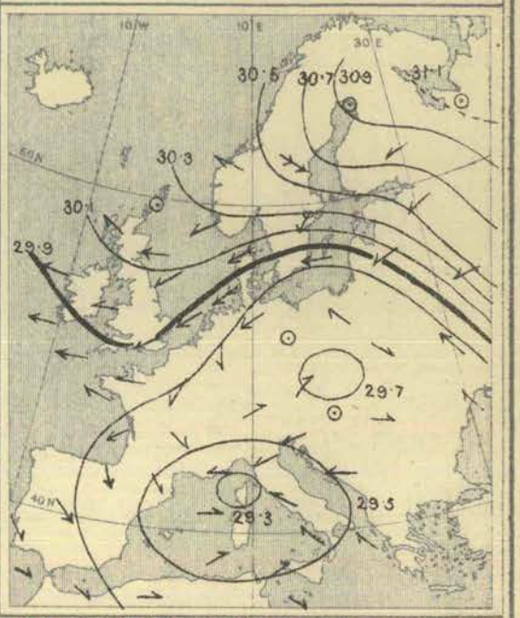
Temperature fallen at all but the Spanish and Algerian stations. Morning readings highest, 59° at Oran, 58° at Nemours, 57° at Malta, and 56° at Algiers; above 50° over the central and southern parts of the Mediterranean generally, but below 40° in the Riviera. Lowest, – 37° Fahr. at Haparanda, – 36° at Archangel, – 18° at Kuopio, and – 15° at Moscow; below zero over Russia generally, below 20° over all the more central parts of Europe, and below the freezing point in most parts of Great Britain. Hard frost continuing all day in nearly all these regions, but thermometer rising to very nearly 50° in the extreme south of France, and exceeding that point over southern Italy, and on the coasts of Spain.

Barometer and Wind.

8 a.m.



6 p.m.

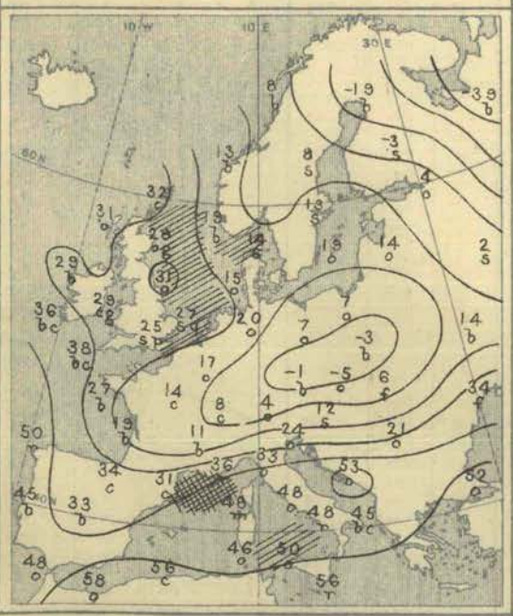


Wind strong from the Eastward over our Islands, France, and the west of Norway, inclining to the North-Eastward in the east, but to the South-Eastward in the west. North-Easterly gales reported over Denmark and the south of Scandinavia, and moderate to strong winds from the same quarter over northern Russia. Light South-Easterly over the southern parts of Russia; variable in Germany and Austria; North-Easterly in Italy, but Westerly in Spain and Algeria. North-Easterly gale spreading later to the Gulf of Finland; no important change occurring elsewhere.

Barometer highest, 30·8 ins. and upwards over Lapland and the extreme north of Russia; 30·0 ins. and upwards in an anticyclone covering the whole of northern Europe, including the North Sea and the northern parts of our Islands. Lowest, 29·4 ins. and less in a large shallow depression lying over Italy, the Adriatic, and the neighbouring provinces; depression subsequently moving slowly westwards and becoming deeper; new disturbances beginning to form over Poland and north Germany.

Monday, 2nd January.

Temperature and Weather. — 8 a.m.

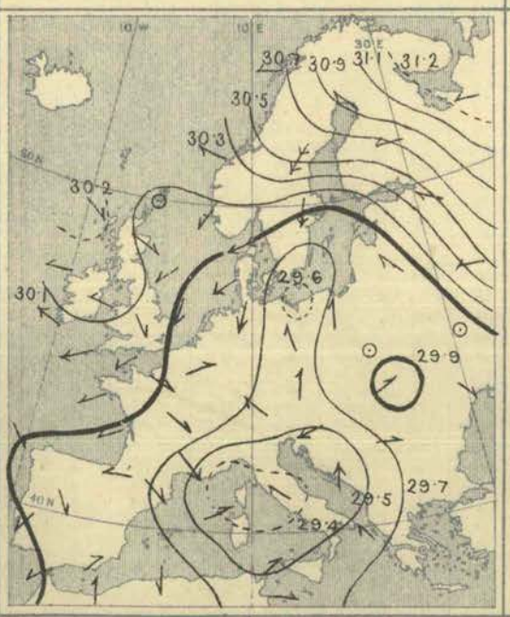


Weather fine in most parts of Ireland, England, France, and Spain, as well as in the west of Norway, but snow showers falling in the south-east of England. Cloudy or overcast in nearly all other localities, with snow in many parts of Denmark, Sweden, Russia, and Austria, and with rain at Corunna, Nice, Naples, and Malta. Snow falling later over the northern and eastern parts of Great Britain, as well as in Jersey.

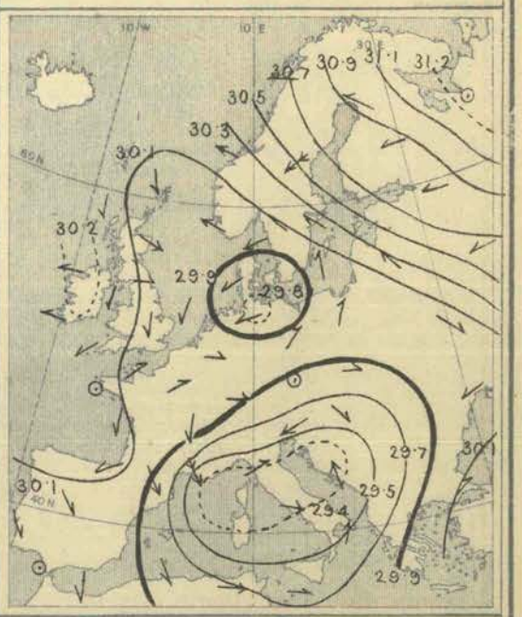
Temperature risen quickly in Finland and central Russia, and to a less extent in Italy, but fallen in nearly all other countries. Morning readings highest, 58° at Oran, 56° at Algiers and Malta, and 53° at Lesina; above 45° over the southern parts of Italy, and also on the coasts of the Iberian Peninsula. Lowest, – 39° Fahr. at Archangel, – 19° at Haparanda, – 8° at Uleaborg, and – 5° at Cracow; below 10° over the greater part of central Europe, and below the freezing point in all but the most southern countries and the extreme south-west of our Islands. Remaining below 32° all day in many parts of England, and below 20° over central France, but exceeding 40° in the Riviera, and exceeding 50° in many parts of Spain and Italy.

Barometer and Wind.

8 a.m.



6 p.m.



Wind light to fresh from the Northward in the north and east of Great Britain, and from the Eastward in the western parts of our Islands and France. Strong to a gale from the Eastward over the Gulf of Finland, and from the North-Eastward over Denmark and the southern parts of Scandinavia. Light from South-East over central Russia, variable in Germany and Austria. Easterly or South-Easterly in Italy, but North-Westerly in Spain, Algeria, and the extreme south of France, with a gale at Toulon. Gale in Sweden moderating somewhat later, no important change occurring elsewhere.

Barometer highest, 31·18 ins. at Archangel, 30·7 ins. and less in Lapland and northern Russia generally. Lowest, 29·4 ins. and less in a depression lying over northern Italy and the Gulf of Genoa; 29·6 ins. and less in another system lying over the southern parts of the Baltic, gradients very steep over Sweden, Finland, and western Russia. Baltic depression subsequently filling up gradually, but small secondary disturbance forming off the north-east of Scotland.

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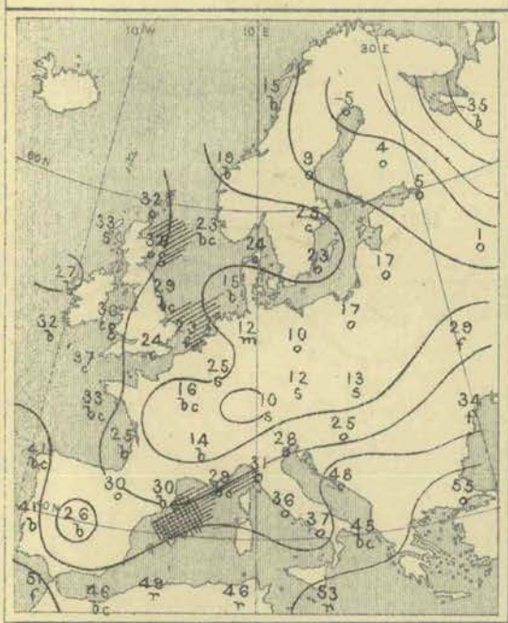
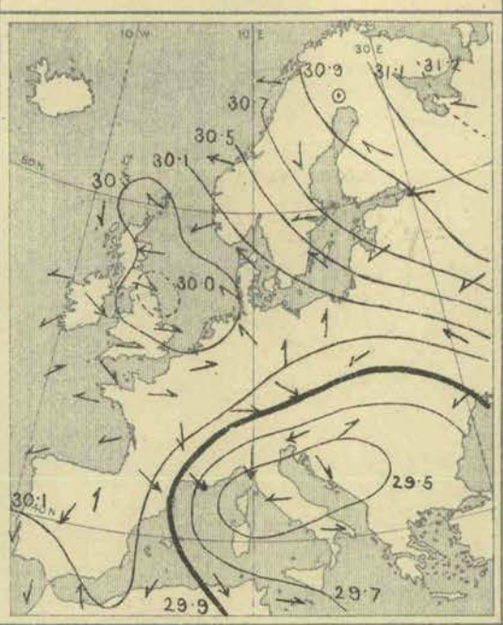
III.—SUMMARY OF WEATHER OVER EUROPE.

Tuesday, 3rd January.

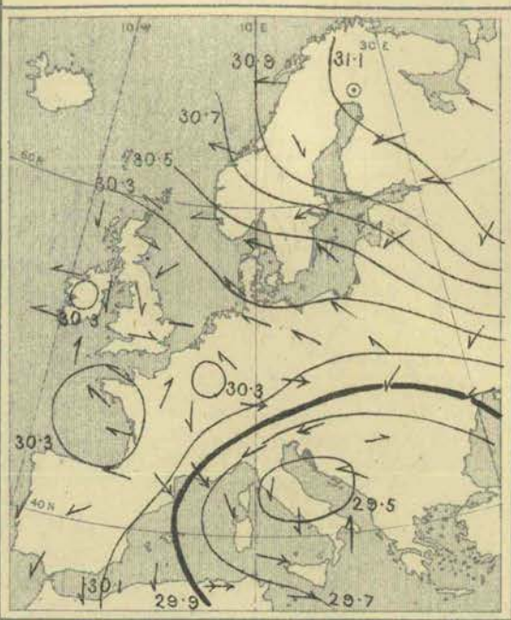
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fine at most of our own western and southern stations, and also in France, Spain, and the west of Norway. Dull elsewhere, with snow in central England and the north of Scotland, as well as in Belgium, south Germany, and Poland; fog reported in the south of Russia. Snow showers falling during day in many parts of Great Britain; and larger amounts reported in Austria. Heavy rain (1·2 ins.) occurring at Palermo.

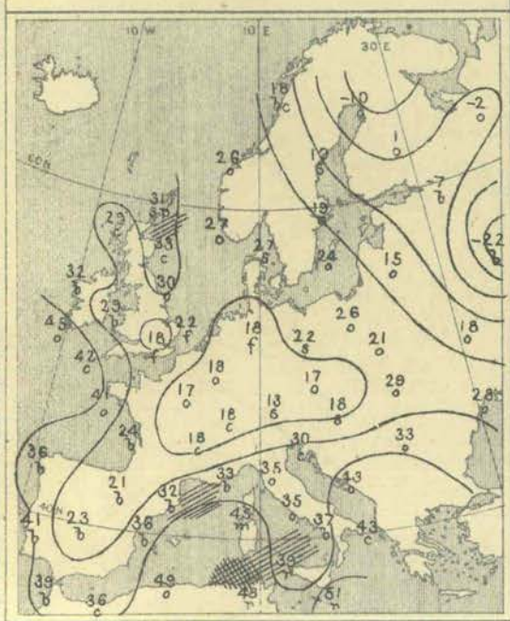
Temperature fallen over Ireland and the greater part of southern Europe, but risen in most other localities. Morning readings highest, 55° at Nemours, 53° at Malta, and 51° at San Fernando, above 40° over the southern parts of the Mediterranean generally, as well as on the coasts of Spain. Lowest, − 35° Fahr. at Archangel, − 5° at Haparanda, + 1° at Ulcaborg and Moscow, and 2° at Warsaw; below 20° over northern and central Europe generally, as well as over central Ireland; below the freezing point in all but the extreme southern parts of the Continent, but above it in the west and north of Great Britain. Continuous frost prevailing throughout the day in many parts of England and the Continent, and thermometer remaining below 40° even in the Riviera. Exceeding 50° over the southern parts of Spain and Italy.

Wind light or moderate from the Northward in Scotland, and from the Westward or North-Westward over England, as well as in south Germany. Variable in Ireland, but Easterly in the west of France, and North-Easterly in Spain. Moderate to strong from the Eastward or South-Eastward over Scandinavia and Denmark, and light from the same quarters in Russia. Strong from North-East over the northern parts of Italy and the Adriatic, and from North-West in the south of France and eastern Algeria, light from the Westward in the south of Italy. No important change occurring during day.

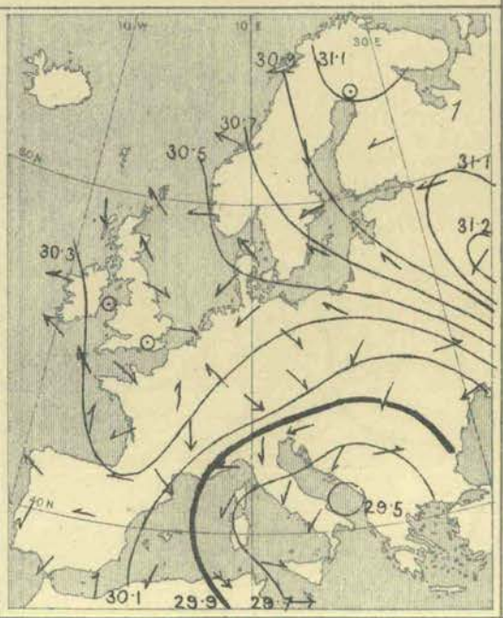
Barometer highest, 31·25 ins. at Archangel, 30·8 ins. and upwards in an anticyclone lying over all the northern parts of Russia and Sweden; 30·2 ins. and upwards in another system covering the south-west of our Islands and the greater part of France. Lowest, 29·5 ins. and less in a large depression of elongated form extending from the neighbourhood of Corsica to Servia and Bosnia; 30·0 ins. and less in a shallow system lying off the north-east of England. Large anticyclone in far north subsequently spreading out in a south-westerly direction, and depression off our north-east coasts partially filling up.

Wednesday, 4th January.

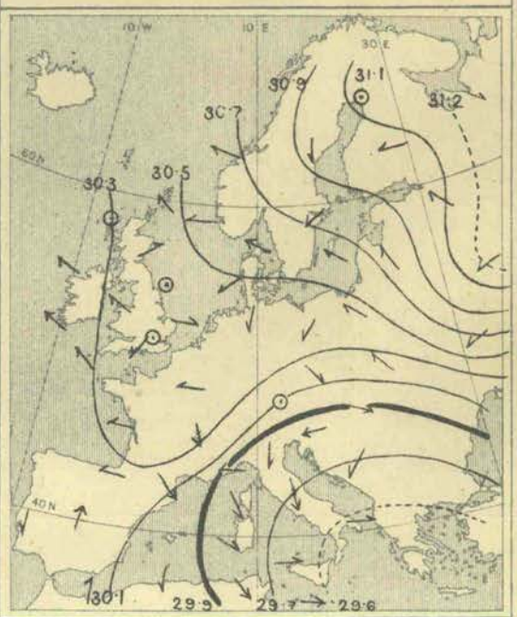
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over the British Islands and western Europe as a whole, but foggy over the midland and the south-eastern parts of England, as well as at Cuxhaven; dull over northern Europe, with snow in places, unsettled over the central and south-eastern countries, with snow in many places. Rain falling over Tunis, Malta, and Sicily. Some rain at our western stations later, snow in the north, as well as in some parts of Germany and France—weather dry over Great Britain, and in most places bright. Heavy rain (0·8 in.) again falling at Palermo.

Temperature beginning to rise quickly over Ireland, and slightly at the Norwegian stations, as well as over central Europe. Morning readings highest, 51° at Malta, and above 40° on the coasts of Algeria, as well as at the stations situated in the extreme south-west of the United Kingdom; much lower elsewhere. Hard frost prevailing over the inland countries generally, and lowest readings of all, (1) − 29° Fahr. at Moscow, − 10° at Haparanda, + 14° at Hangö; (2) 13° at Wiesbaden, 14° at Le Mans, 17° at Paris, 18° at Brussels and Lyons; (3) 12° at Cambridge, 15° at Dungeness, 18° in London, 20° at Parsonstown. Hard frost over England and most inland parts of Europe during succeeding night.

Wind chiefly Easterly and moderate over northern Europe, South-Easterly and variable over Scotland and Ireland, very variable over England; North-Easterly to North-Westerly over central, south-eastern, and southern Europe, North-Westerly to Westerly over Algeria, Tunis, Malta, and Sicily. Becoming more generally South-Easterly over our western districts later; no important change occurring elsewhere.

Barometer highest, 31·2 ins. and more to 30·8 ins. over northern Europe and central Russia, and exceeding 30·5 ins. all over Scandinavia; exceeding 30·3 ins. over nearly the whole of the British Islands, northern France, and north Germany. Lowest 29·6 ins. and less over the southern parts of Italy and the Adriatic. Falling somewhat at our western stations later, but rising slowly over England and the eastern shores of the North Sea.

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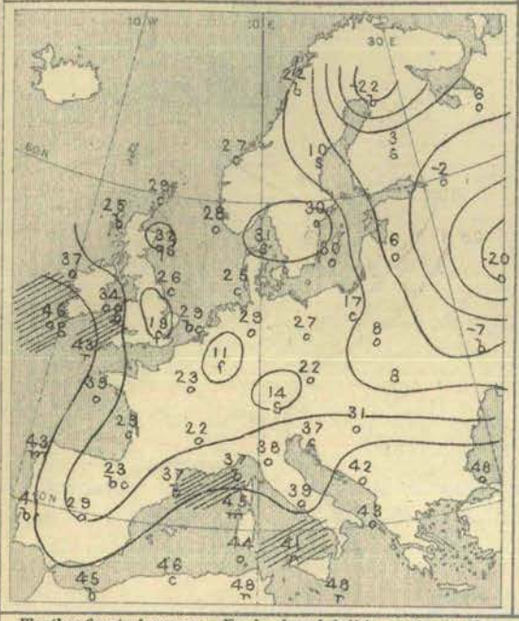
III.—SUMMARY OF WEATHER OVER EUROPE.

Thursday, 5th January.

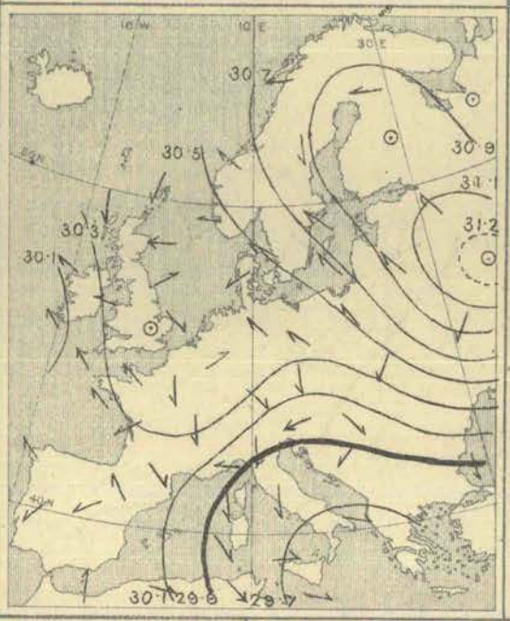
Temperature and Weather. 8 a.m.



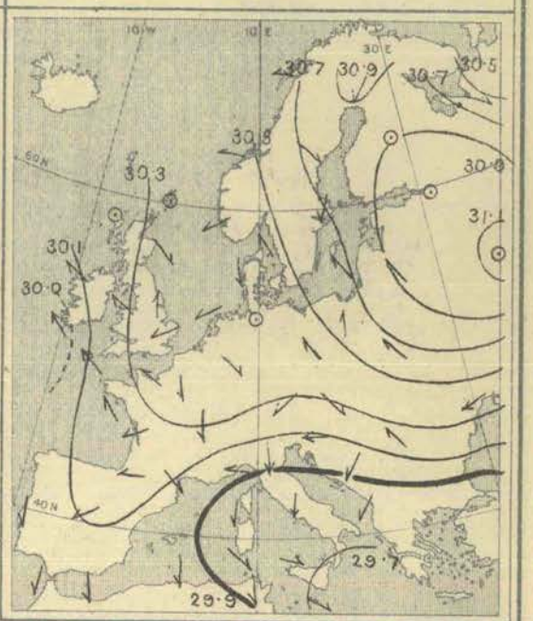
Weather fine to foggy over England, and dull in nearly all other parts of Europe, with rain in the south-west of our Islands, snow in the east of Scotland and at Malin Head, as well as in some parts of Scandinavia, Finland, and Germany. Fine and bright in the north of Scandinavia and the extreme south of France. Rain falling at Palermo, Malta, and La Calle. Fog continuing in the south-east of England all day, and considerable rain falling in the west of our Islands, as well as at La Calle and Constantinople.

Temperature changed very irregularly; fallen over England, but risen in many other countries. Morning readings highest, (1) 48° at La Calle and Malta, and 46° at Algiers; (2) 46° at Valencia (Ireland), 45° at Roche's Point, and 43° at Scilly. Lowest, – 22° Fahr. at Haparanda, – 20° at Moscow, – 7° at Kiev, and – 6° at Ulealborg; below zero over the greater part of Russia, and below 20° over the inland and south-eastern parts of England; lowest reading in our Islands, 12° at York. Hard frost continuing all day in many parts of England, and rapid fall of temperature occurring in Scotland. Thermometer reaching 50° in the extreme south of France and rising to 54° at Lisbon.

Barometer and Wind. 8 a.m.



6 p.m.

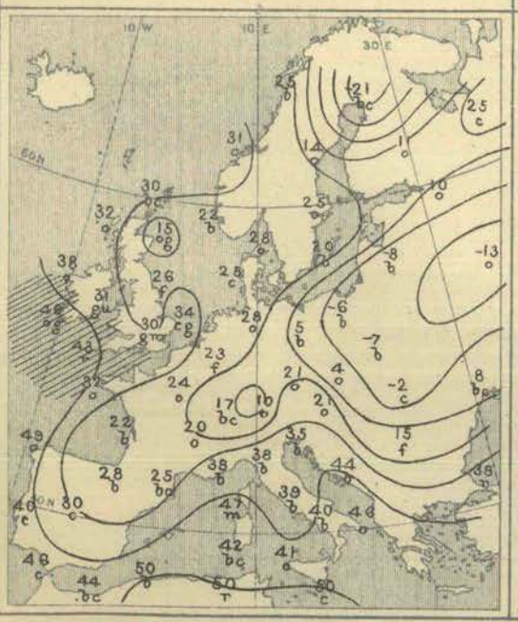


Wind strong from the South-Eastward or Southward in the west of our Islands, but variable or light from the North-Westward in the eastern districts. Easterly or South-Easterly over north Germany, Denmark, the Baltic, and the southern parts of Scandinavia, North-Westerly or Westerly over Austria and south Germany, Easterly in the west of France, North-Easterly over Spain and northern Italy, North-Westerly in Tunis, and Westerly in the south of Italy. Light North-Easterly breezes setting in later at some of our more eastern stations.

Barometer exceedingly high over Russia and Lapland. Highest, 31·27 ins. at Moscow, 30·4 ins. and upwards in a large anticyclone covering the whole of northern and eastern Europe, and extending westwards over the North Sea and the central parts of England. Lowest, 29·7 ins. and less in a depression lying to the southward of Italy, 30·1 ins. and less in another to the south-westward of Ireland. Gradual fall taking place over western Europe during day, and depression in south-west spreading slowly eastwards.

Friday, 6th January.

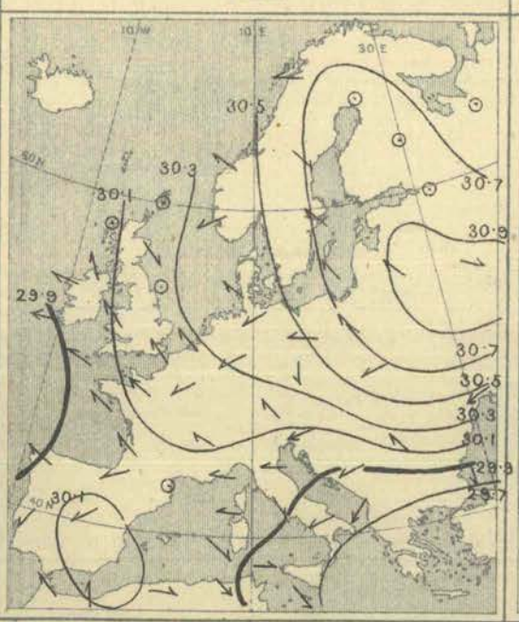
Temperature and Weather. 8 a.m.



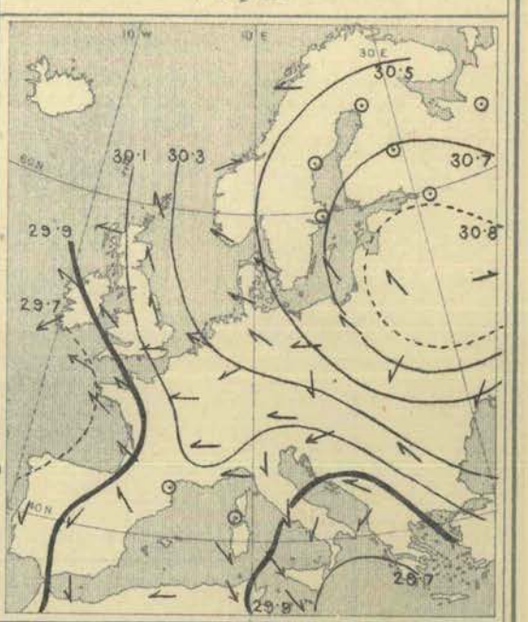
Weather in morning fine and bright at several isolated stations over the southern, central, and northern parts of Europe, as well as on the shores of the Baltic and in the north of Scotland, cloudy or overcast elsewhere, with fog or haze in several places. Snow in several parts of Great Britain, sleet and cold rain at our western stations. Considerable rainfall on our south-western coasts later, and small quantities of snow in the north and east of our Islands, weather fair generally elsewhere.

Temperature risen considerably over England and Belgium, changing rapidly and irregularly in Scotland. Morning readings lowest, – 21° Fahr. at Haparanda, – 13° at Moscow and Kharkov, – 8° at Riga, – 7° at Warsaw, – 2° at Lemberg; + 5° at Breslau and Berlin, 15° at Hermanstadt, 17° at Belfort, 24° at Paris; 11° at Nairn, 15° at Aberdeen, 26° at Loughborough, 30° in London. Rising to somewhat above the freezing point in most parts of our Islands and France later, exceeding 40° on our extreme south-west coasts; touching 50° at Nice and in several parts of Italy, exceeding 60° in some parts of Algeria.

Barometer and Wind. 8 a.m.



6 p.m.



Wind chiefly Easterly to North-Easterly over south-eastern, southern, and central Europe, and blowing very strongly at some of the Black Sea and Adriatic stations; mainly South-Easterly over Scandinavia, the North Sea, and the British Islands—force, light to moderate in most places, but blowing very strongly at the mouth of St. George's Channel—moderating there later.

Barometer highest, 31·0 ins. to 30·2 ins. in a large anticyclone covering nearly the whole of Europe, and having its centre near Moscow. Lowest, 29·9 ins. and less over the Atlantic to the south-westward of Valencia (Ireland) and the north-westward of Corunna, and 29·7 ins. and less over Asia Minor, Greece, and the region lying between Cyprus and Malta. Falling throughout our Islands during the day, rising slightly over Finland, the southern parts of Scandinavia, and the Baltic.

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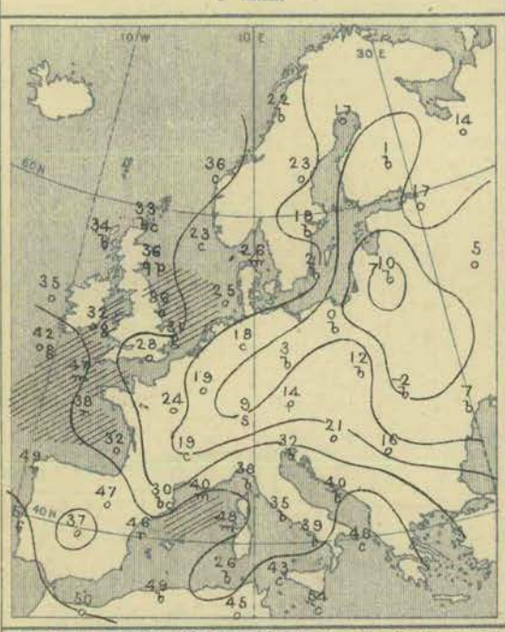
III.—SUMMARY OF WEATHER OVER EUROPE.

Saturday, 7th January.

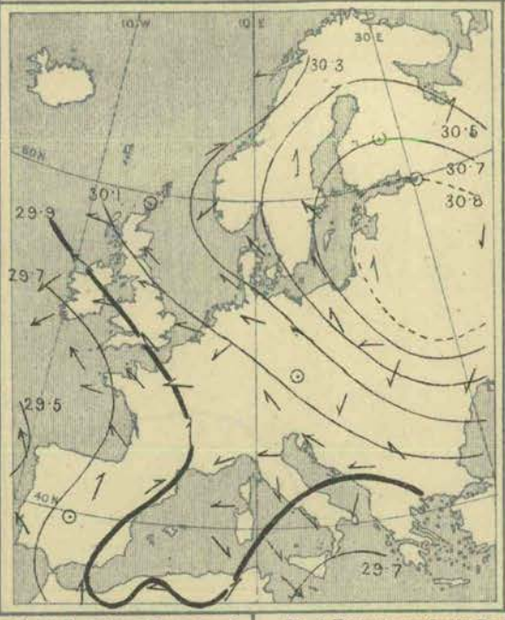
Temperature and Weather.

8 a.m.

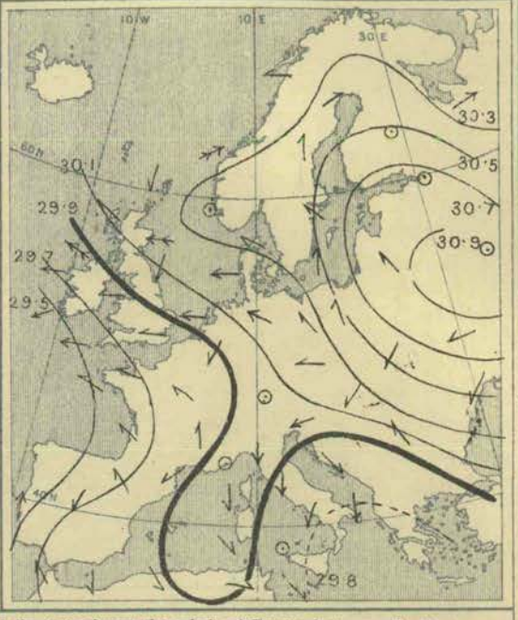


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning still fine and bright over the Baltic, central and south-eastern Europe, and on the Algerian coast, as well as in the north-west and west of Scotland; dull, gloomy and very unsettled elsewhere, with rain over the north-west of Spain, Brittany, and the south-east of Ireland, sleet at Oxford, snow at Munich, showers in the east of Scotland. Sleet and rain later over our western districts (heavy rain at Roche's Point), gloomy, foggy weather over England.

Temperature risen very decidedly over Scotland and Russia, as well as over Spain and the south-west of France, slightly in the north-east of England. Morning readings exceeding 50° at Malta, Nemours, and Lisbon, and exceeding 40° at some other southern stations, as well as on our extreme south-western coasts; much lower elsewhere. Lowest, (1) – 17° Fahr. at Haparanda, – 11° at Kharkov, – 10° at Riga; 0° (zero) at Neufahrwasser and Breslau, 3° at Berlin, 9° at Munich; (2) 19° to 26° over central France; (3) 27° to 30° over our own inland countries. Rising very slowly over England later, and slightly exceeding the freezing point towards evening. Touching 54° at Biarritz, 56° at Palermo, 61° at Cape Béarn and Tunis, 63° at Algiers.

Wind Easterly to South-Easterly over almost the whole of Europe, but more Southerly over Sweden, and South-Westerly at Christiansund; very variable over the Mediterranean. Blowing strongly on our western coasts, and over many parts of the Adriatic, moderately elsewhere, except over northern and central Russia, where it was nearly calm. Increasing greatly over Portugal.

Barometer highest, 29·8 ins. and more to 30·2 ins. in an anticyclone lying over Russia, and spreading westward to the North Sea, Germany, and Austria. Lowest, 29·6 ins. and less over the Atlantic, to the westward of the Bay of Biscay, and below 29·7 ins. over the south-eastern parts of the Mediterranean. Falling generally during the day—most over the south-western and western countries.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force is indicated thus: ⟿ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze: and ⊙ = a calm. In the left-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Germany, Sweden, and Norway, and 7 a.m. in France, Algeria, Italy, Austria, and Russia; that for 6 p.m. is prepared from observations made at 6 p.m. in the British Islands and France, 7 p.m. in Algeria, 8 p.m. in Sweden and Norway, Germany, and Austria, and 9 p.m. in Russia, Belgium, and Italy. The time indicated in each case is the standard time for each country.

GENERAL NOTES.

In the course of this week a hard frost has been prevalent over almost the whole of Europe. The cold has occurred in a vast anticyclone of exceptional intensity; the central parts of which have covered Russia, where the barometer stood at 31·0 ins. and upwards for several days, and on Wednesday and Thursday exceeded 31·2 ins. at Moscow. The prevalent wind has been Easterly (South-East to North-East) at all but the Mediterranean and Algerian stations, where a Westerly to Northerly current has been observed with relatively high temperatures.

Towards the end of the week the anticyclone was dispersing slowly, and there were indications that a thaw was approaching our Islands.

BRIGHT SUNSHINE Values for the Week in addition to those found on page 2.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	0·9	?	2	?	EASTBOURNE	20·4	?	37	?
OSWALDKIRK (Yorkshire)	14·2	?	27	?	TENBY	17·0*	?	31*	?
WORKSOP	9·1	+ 1·7	17	+ 3	NEWQUAY	6·3	?	11	?
THURCASTON (Leicestershire)	8·2	+ 2·2	15	+ 3	TORQUAY	15·4*	?	28*	?
MARGATE	12·2	?	22	?	ARLEY COTTAGE (County Cavan)	9·7	?	19	?
WESTBOURNE (Sussex)	9·4*	?	17*	?	GUERNSEY	8·5*	?	15*	?
BRIGHTON	12·3	?	22	?					

The values at Westbourne, Tenby, Torquay and Guernsey are obtained by Jordan's Photographic Recorder.

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WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; R. H. SCOTT, F.R.S., SECRETARY.
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VOL. X. No. 2.] *Third Series.* WEEK ENDING SATURDAY, 14TH JANUARY, 1893 [*Price 6d.* [*Annual subscription, post paid.* £1 10s. 0d.

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871-90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty-five years 1866-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90, only. BRIGHT SUNSHINE.—*The Mean values* employed are those for the corresponding periods in the ten years 1881-90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

	DISTRICTS. (See p. 8.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 1st, 1893. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH -	45	16	38·4	29·0	33·9	5 below.	0	− 8	57	+24	0	− 14	152	+ 84
	1. SCOTLAND, EAST -	47	15*	38·4	30·7	34·7	2 below.	0	− 8	51	+11	0	− 15	156	+ 74
	2. ENGLAND, N.E. - -	42	22	38·5	33·1	35·9	2 below.	0	− 7	43	+ 6	0	− 13	138	+ 60
	3. ENGLAND, EAST -	43	25	37·2	31·2	34·3	3 below.	0	− 7	54	+10	0	− 16	165	+ 75
	4. MIDLAND COUNTIES	42	22	37·0	30·3	33·8	4 below.	0	− 9	57	+13	0	− 18	174	+ 82
	5. ENGLAND, SOUTH -	41	27	37·6	32·1	35·0	5 below.	0	−10	49	+16	0	− 21	157	+ 90
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST -	46	23	39·7	30·5	35·3	4 below.	0	−10	47	+17	0	− 18	132	+ 69
	7. ENGLAND, N.W. -	45	28	38·8	33·2	36·1	4 below.	0	− 8	41	+10	0	− 17	129	+ 66
	8. ENGLAND, S.W. -	47	26	40·0	32·9	36·6	5 below.	0	−15	38	+15	0	− 28	111	+ 66
	9. IRELAND, NORTH -	47	27	40·7	34·0	37·5	3 below.	0	−14	32	+ 6	0	− 26	101	+ 51
	10. IRELAND, SOUTH -	48	27	42·0	34·6	38·4	4 below.	0	−20	25	+ 5	0	− 39	75	+ 37
	— CHANNEL ISLANDS -	53	32	44·5	37·2	41·0	3 below.	7	−15	29	+10	7	− 36	61	+ 41

Rainfall.

	DISTRICTS. (See p. 8.)	For the Week. Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 1st, 1893. Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.
			10ths of In.	10ths of In.			Ins.	Ins.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH -	4	4	9 less.	8	− 2	0·6	− 2·0
	1. SCOTLAND, EAST -	4	3	4 less.	9	+ 2	0·7	− 0·6
	2. ENGLAND, N.E. - -	5	3	2 less.	10	+ 3	0·7	− 0·2
	3. ENGLAND, EAST -	5	3	1 less.	10	+ 3	0·7	− 0·2
	4. MIDLAND COUNTIES-	4	2	3 less.	7	0	0·6	− 0·5
	5. ENGLAND, SOUTH -	6	7	0 (average)	8	+ 1	0·9	− 0·3
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST -	2	1	12 less.	6	− 3	0·3	− 2·4
	7. ENGLAND, N.W. - -	2	2	6 less.	6	− 2	0·4	− 1·1
	8. ENGLAND, S.W. - -	4	7	3 less.	6	− 2	1·0	− 1·0
	9. IRELAND, NORTH -	4	4	5 less.	8	− 1	0·9	− 0·7
	10. IRELAND, SOUTH -	3	3	7 less.	7	− 1	1·8	− 0·1
	— CHANNEL ISLANDS -	5	8	1 less.	9	0	1·7	+ 0·1

Bright Sunshine.

	DISTRICTS. (See p. 8.)	For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 1st, 1893. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH -	14	+15	29	+33	20	+ 9	21	+ 9
	1. SCOTLAND, EAST -	7	− 1	13	− 4	10	− 8	10	− 8
	2. ENGLAND, N.E. - -	3	− 6	6	−11	14	+ 2	13	+ 1
	3. ENGLAND, EAST -	6	− 6	12	− 7	16	− 3	15	− 2
	4. MIDLAND COUNTIES-	8	− 1	15	− 1	18	+ 2	17	+ 2
	5. ENGLAND, SOUTH -	5	− 5	9	− 7	17	− 1	15	− 1
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST -	15	+ 7	28	+15	24	+11	23	+10
	7. ENGLAND, N.W. - -	3	− 4	6	− 6	14	0	13	0
	8. ENGLAND, S.W. - -	11	+ 1	19	+ 2	24	+ 3	21	+ 2
	9. IRELAND, NORTH -	9	− 2	16	− 2	18	0	17	0
	10. IRELAND, SOUTH -	9	− 3	16	− 5	17	− 7	16	− 6
	— CHANNEL ISLANDS -	7	− 5	11	− 9	18	−14	15	−12

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather during this period was less cold than that of the preceding fortnight, and a gradual thaw was prevalent during the day-time in all parts of the Kingdom. Rain, sleet, or snow was experienced at times, and the sky, as a whole, was very cloudy and gloomy; in the extreme west and north, however, some fine bright intervals occurred.

Temperature continued below the mean, but was much less low than during the previous week, the deficit ranged from 2° in Scotland E. and England N.E. to 5° in Scotland N., England S. and S.W. The highest of the maxima were recorded on the 13th at most of the Scotch stations, and on the 14th over England and Ireland, and ranged from 53° in the Channel Islands to 47° or 48° in some of the western and northern districts, to 42° in England N.E. and the Midland Counties, and to 41° in England S. The lowest of the minima were registered on rather irregular dates, and varied from 15° in Scotland E. and 16° in Scotland N. to between 22° and 28° in most other districts, and to 32° in the Channel Islands.

Rainfall just equalled the mean in England S., but was less in all other districts; in Scotland W., England N.W., and the Midland Counties, the fall was very slight.

Bright Sunshine exceeded the mean considerably in the north and west of Scotland, and slightly in the south-west of England; elsewhere the amount recorded was very small. The percentage of the possible duration ranged from 29 in Scotland N. and 28 in Scotland W., to only 6 in England N.E. and N.W.

Barometer and Wind.—During the earlier part of the week a depression which had spread over our western and southern districts was moving south-eastwards outside our south-western coasts, and producing fresh or strong Easterly winds over the whole Kingdom. As this system passed away over France the barometer rose very generally and the wind became moderate from the North-Eastward. Towards the end of the week, however, pressure gave way in the north, and the highest readings being transferred to our western coasts, the wind shifted to the Northward and North-Westward.

* ERRATA.—The corresponding value in last week's report should read "− 4" instead of "− 2," and the same value should be substituted for "− 2" in the eleventh line of the "General Remarks."

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II.—DATA from which the SUMMARY on page 7 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°				Inches	Inches.				
0. SCOTLAND, N.	Sumburgh Head	41	26	38·9	30·7	35·0	− 4·3	0	49	6	0·43	−0·42	*	*	*	*
	Stornoway	44	26	38·9	31·0	35·1	− 3·8	0	48	3	0·27	−0·93	21·1	+15·3	45	+33
	Wick	41	25	38·7	30·6	34·8	− 3·3	0	50	5	0·52	+0·04	*	*	*	*
	Lairg ℌ	40	16	37·1	24·0	30·8	− 5·4	0	78	4	0·40	−0·40	*	*	*	*
	Glencarron ℌ	44	24	37·5	29·0	33·4	− 4·1	0	60	4	0·73	−1·87	*	*	*	*
	Fort Augustus ℌ	45	24	38·4	27·2	33·4	− 5·3	0	60	5	0·31	−0·75	6·7	?	14	?
	Fort William ℌ	45	27	39·1	30·0	34·7	− 5·0	0	51	3	0·14	−2·10	13·2	?	27	?
1. SCOTLAND, E.	Nairn	42	25	38·6	30·6	34·8	− 2·8	0	50	6	0·39	−0·06	*	*	*	*
	Aberdeen	41	27	38·1	33·0	35·7	− 2·2	0	44	6	0·62	+0·07	9·3	− 2·1	19	− 4
	Braemar ℌ	39	15‡	35·5	28·2	32·0	− 2·8	0	70	4	0·20	−0·49	4·8†	?†	10†	?†
	Ochtertyre ℌ	47	26	40·3	28·7	34·7	− 1·8	0	51	2	0·14	−1·01	*	*	*	*
	Leith ℌ	43	28	39·6	32·3	36·1	− 3·0	0	41	2	0·02	−0·42	*	*	*	*
	Marchmont ℌ	42	29	38·1	31·3	34·8	− 1·6	0	50	2	0·12	−0·51	5·5	?	11	?
2. ENGLAND, N.E.	Alnwick Castle	42	22	38·9	32·9	36·0	− 1·8	0	42	5	0·29	−0·21	*	*	*	*
	Durham	42	30	37·7	32·4	35·2	− 1·8	0	48	5	0·16	−0·34	3·0	− 6·9	6	−12
	Shields	42	32	39·6	34·3	37·1	− 1·5	0	34	5	0·29	−0·11	*	*	*	*
	Scarborough ℳ	41	31	39·0	34·2	36·7	− 1·9	0	37	5	0·52	+0·07	*	*	*	*
	York	41	29	38·3	31·4	35·0	− 2·6	0	49	4	0·15	−0·27	1·0	− 4·7	2	− 9
	Spurn Head	40	32	37·6	33·4	35·6	− 2·7	0	45	6	0·28	−0·04	*	*	*	*
3. ENGLAND, E.	Hillington ℳ	39	29	37·0	32·1	34·7	− 2·5	0	51	6	0·25	−0·20	7·3	− 2·2	14	− 2
	Yarmouth	39	30	36·9	32·1	34·6	− 3·2	0	52	6	0·56	+0·09	*	*	*	*
	Geldeston	43	31	38·4	31·9	35·3	− 2·9	0	47	7	0·30	−0·07	6·9	− 4·7	13	− 8
	Cambridge	40	25	37·2	29·1	33·4	− 4·2	0	60	4	0·19	−0·15	4·0	− 6·7	7	−12
	Rothamsted	39	27	36·2	30·6	33·5	− 3·7	0	60	5	0·42	−0·16	6·6	?	12	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	40	22	37·0	28·1	32·7	− 4·7	0	65	1	0·02	−0·42	*	*	*	*
	Loughborough	41	22	37·4	29·6	33·7	− 4·1	0	58	5	0·12	−0·33	*	*	*	*
	Stamford (Ketton Hall)	41	27	37·3	30·7	34·1	− 3·3	0	55	4	0·10	−0·35	*	*	*	*
	Cheadle ℳ	38	27	36·6	30·1	33·5	− 3·2	0	60	3	0·06	−0·56	*	*	*	*
	Churchstoke ℳ	42	26	36·6	30·4	33·6	− 4·5	0	59	3	0·33	−0·34	6·7	− 3·0	12	− 6
	Hereford ℳ	42	27	37·3	31·1	34·3	− 4·3	0	54	4	0·40	−0·17	*	*	*	*
	Cirencester	40	25	36·4	30·7	33·7	− 3·9	0	58	4	0·40	−0·30	11·3	+ 1·8	21	+ 4
	Oxford	41	27	37·3	31·6	34·6	− 3·8	0	52	5	0·34	−0·16	11·5	+ 2·8	21	+ 5
5. ENGLAND, S.	London	41	28	38·1	32·6	35·5	− 3·7	0	46	6	0·52	+0·03	3·6†	− 2·1†	7†	− 2†
	North Foreland	40	27	37·9	32·3	35·2	− 3·9	0	48	7	0·41	?	*	*	*	*
	Strathfield Turgiss ℳ	36	27	35·8	31·5	33·7	− 4·3	0	58	6	0·85	+0·30	*	*	*	*
	Dungeness	41	29	38·3	32·1	35·3	− 4·7	0	47	7	0·50	−0·10	*	*	*	*
	Hastings (St. Leonards)	41	30	38·4	32·1	35·4	− 4·7	0	46	4	0·58	−0·08	4·6	− 8·1	8	−14
	Southampton	40	30	38·1	32·1	35·2	− 4·8	0	48	5	0·65	−0·12	6·0	− 4·0	11	− 7
	Hurst Castle	41	31	38·3	33·0	35·8	− 5·0	0	43	4	0·75	+0·08	*	*	*	*
	Stowell ℳ	40	28	36·2	31·0	33·7	− 5·0	0	58	6	1·05	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	44	26	41·2	28·3	35·0	− 5·3	0	49	3	0·23	−1·82	*	*	*	*
	Glasgow	44	26	38·5	31·6	35·2	− 3·2	0	48	2	0·02	−0·93	14·5	+ 9·9	28	+20
	Ardrossan	46	25	40·0	30·7	35·5	− 4·8	0	46	0	—	−0·47	*	*	*	*
	Glenlee ℌ	45	23	37·6	28·7	33·3	− 4·1	0	61	2	0·04	−1·70	*	*	*	*
	Douglas (Isle of Man)	46	29	41·3	33·2	37·4	− 2·2	0	32	3	0·35	−0·71	14·4	+ 5·6	27	+10
7. ENGLAND, N.W.	Newton Reigny															
	Stonyhurst	40	30	37·7	32·6	35·3	− 2·7	0	47	0	—	−0·97	2·2	− 4·5	4	− 8
	Blackpool ℳ	43	30	38·8	33·0	36·0	− 2·3	0	42	0	—	−0·69	8·2	+ 1·6	15	+ 3
	Manchester	40	30	37·6	32·0	34·9	− 5·1	0	50	1	0·03	−0·72	0·0†	?†	0†	?†
	Liverpool Obsy. (Bidston)	41	28	38·0	32·7	35·5	− 4·1	0	46	3	0·09	−0·43	*	*	*	*
	Llandudno ℳ	44	32	39·7	33·6	36·8	− 4·8	0	36	4	0·34	−0·31	2·6	− 4·7	5	− 9
	Holyhead	45	31	40·7	35·4	38·2	− 4·1	0	27	4	0·65	−0·15	*	*	*	*
8. ENGLAND, S.W.	Llandovery	42	26	38·3	29·4	34·0	− 6·3	0	56	5	0·35	−0·87	*	*	*	*
	Pembroke	44	32	40·3	34·4	37·5	− 5·4	0	32	5	0·45	−0·43	7·8	− 2·7	14	− 6
	Arlington (N. Devon)	40	27	37·4	30·0	33·9	− 5·8	0	57	5	0·91	−0·16	*	*	*	*
	Cullompton ℳ	41	29	37·8	31·8	34·9	− 5·0	0	50	4	0·77	−0·01	9·1	+ 1·3	16	+ 2
	Falmouth	47	32	43·1	35·3	39·4	− 4·5	3	26	4	0·79	−0·45	12·5	+ 2·1	22	+ 4
	Plymouth	45	30	41·5	34·5	38·1	− 4·0	0	27	4	0·63	−0·29	12·6	+ 3·4	22	+ 5
	Prawle Point	47	31	41·9	34·7	38·4	− 3·7	0	25	3	0·80	+0·08	*	*	*	*
9. IRELAND, N.	Malin Head	46	35	42·0	37·9	40·0	− 0·3	0	14	4	0·30	?	*	*	*	*
	Londonderry	47	32	41·2	34·3	37·9	− 2·3	0	29	4	0·31	−0·61	*	*	*	*
	Edenfel (Omagh)	43	29	37·7	33·3	35·6	− 3·4	0	45	5	0·25	−0·55	*	*	*	*
	Mullaghmore	46	34	42·1	36·1	39·2	− 2·9	0	21	4	0·58	−0·42	*	*	*	*
	Belmullet	46	31	42·1	35·4	38·9	− 4·2	0	24	5	0·44	?	*	*	*	*
	Markree Castle	45	23	41·1	30·9	36·2	− 3·5	0	41	4	0·50	−0·30	7·9	− 1·9	15	− 2
	Brookeborough	44	28	39·2	31·1	35·3	− 3·0	0	47	3	0·29	−0·71	*	*	*	*
	Armagh	45	27	39·7	31·7	35·9	− 3·2	0	43	5	0·28	−0·38	8·0	− 1·7	15	− 2
	Donaghadee	45	31	41·4	35·4	38·5	− 1·8	0	25	4	0·35	−0·33	*	*	*	*
	Edgeworthstown	—	—	—	—	—	—	—	—	3	0·35	−0·35	*	*	*	*
10. IRELAND, S.	Dublin	44	33	41·5	35·8	38·8	− 3·0	0	22	4	0·37	−0·13	9·9	− 1·8	18	− 4
	Parsonstown	44	28	40·9	33·1	37·2	− 2·8	0	34	1	0·11	−0·60	6·5	− 4·0	12	− 8
	Kilkenny	43	32	40·6	34·0	37·4	− 3·8	0	32	3	0·48	−0·32	*	*	*	*
	Waterford	44	32	40·5	34·6	37·7	− 4·9	0	30	2	0·05	−0·97	*	*	*	*
	Roche's Point	46	33	43·3	36·9	40·2	− 3·6	4	19	4	0·83	−0·39	*	*	*	*
	Valencia	48	33	45·1	34·7	40·1	− 5·0	9	29	4	0·05	−1·46	10·1	− 2·2	18	− 4
	Killarney	47	27	42·3	33·3	38·0	− 5·7	1	32	4	0·25	?	*	*	*	*
	Foynes	45	29	41·5	34·2	38·0	− 4·1	0	28	5	0·14	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	53	33	45·9	38·7	42·4	− 3·7	17	9	4	0·34	−0·53	*	*	*	*
	Jersey	46	32	43·1	35·6	39·5	− 2·8	3	24	5	1·15	+0·42	9·7	− 5·1	16	− 9

Stations marked ℳ are in connection with the Royal Meteorological Society, and those marked ℌ with the Scottish Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

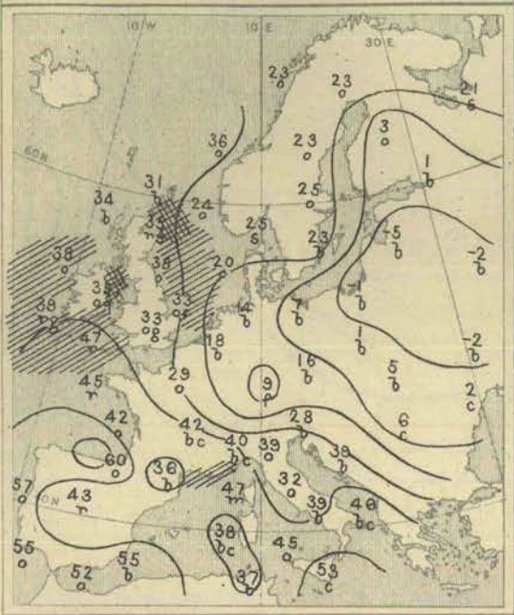
† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

‡ The corresponding value in last week's report should read "− 4" instead of "− 2."

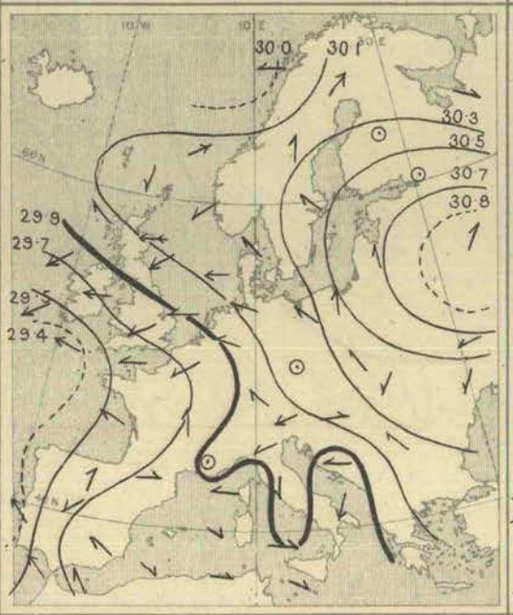
III.—SUMMARY OF WEATHER OVER EUROPE.

Sunday, 8th January.

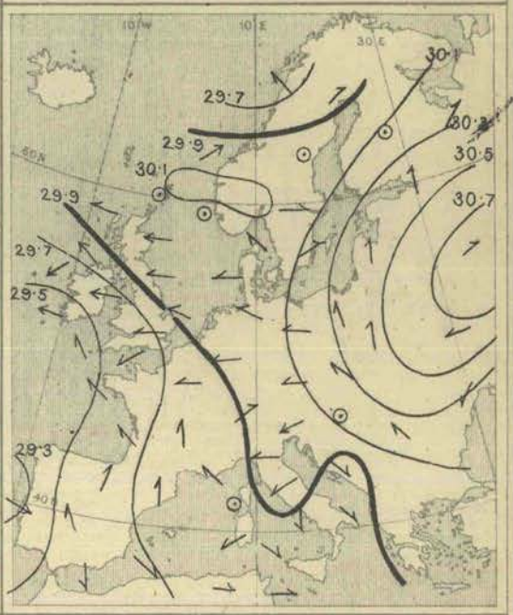
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over Russia and north Germany, as well as at stations on the southern and south-eastern sides of the Mediterranean and in the south of Scotland; very dull elsewhere, and unsettled over our Islands. Rain falling on our southern and western coasts and at Madrid, sleet at Aberdeen, snow at the Scaw; rainfall at Roche's Point very heavy. Rain or sleet later at all the Irish and English stations and in the west of France; heavy snow at Christiansund, and a little at Haparanda.

Temperature rising over Europe as a whole—especially in the south of France—falling in the south of Ireland, frost breaking up over the British Islands and France. Highest morning readings, 60° at Biarritz, 57° at Lisbon, 55° at Algiers, 47° at Scilly. Lowest, – 5° Fahr. at Riga, – 2° at Moscow, Cracow, and Kieff, 0° (zero) at Odessa, 1° at St. Petersburg and Warsaw, 6° at Hermanstadt, and below 10° over the eastern parts of Germany. Rising later to between 35° and 40° over the greater part of England and Scotland, and to 50° at Brest and Lyons. Exceeding 50° over Spain and the southern parts of France and Italy.

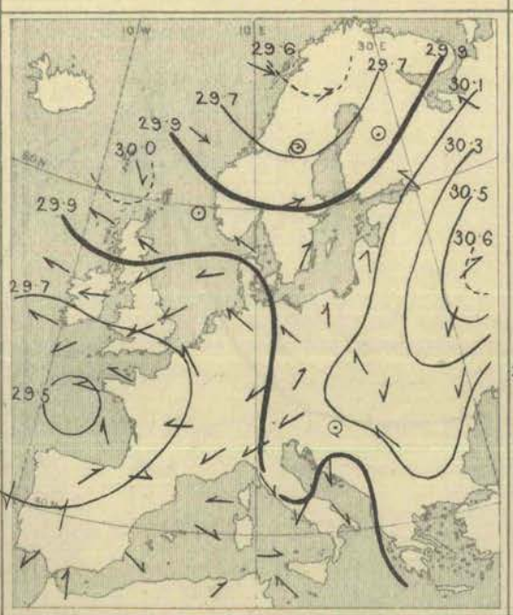
Wind mainly Easterly over Europe—moderate in most places—but fresh to a gale on the coasts of the British Islands; South-Westerly over the northern half of Scandinavia (strong at Christiansund), South-Easterly, strong, in the south-west of Spain. (Newspapers report gales at Lisbon later.)

Barometer highest, 30·8 ins. and more to 30·2 ins. in an anticyclone covering Russia, Poland, eastern Prussia, the Baltic, and Scandinavia, and exceeding 30·2 ins. in a small secondary system lying to the westward of the Shetlands. Lowest 29·4 ins. and less in a depression lying to the westward of Scilly, and in another approaching Lisbon from the westward. Latter system advancing over Portugal later, but former filling up. Well-marked depression appearing off north-west of Norway in evening.

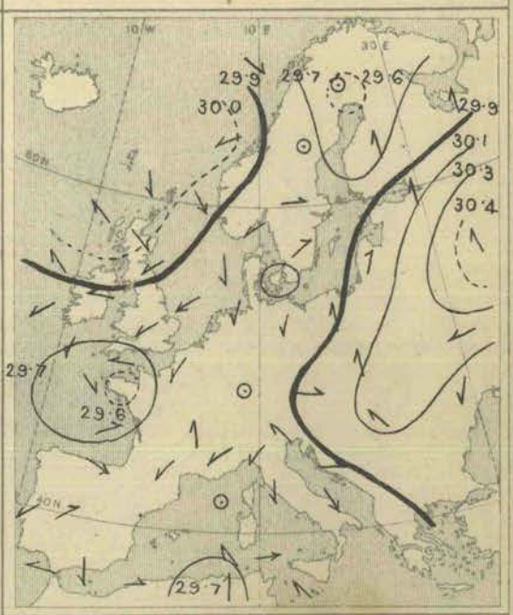
Monday, 9th January.

Temperature and Weather. 8 a.m.

Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over south-eastern and central Europe, as well as on the southern shores of the Mediterranean; dull elsewhere, and very unsettled over the southern parts of our Islands and the north and west of France. Rain at many stations in the latter region, snow at Bodö and Kuopio. Considerable rain over the south of England and north of France during the day, and slight falls at several of the northern and north-western stations. Snow falling over the Gulf of Finland.

Temperature risen over France, fallen over Russia, little change elsewhere. Morning readings exceeding 5 5° at Malta, and several of the Algerian and Spanish stations, and exceeding 40° in the west of France and south-west of our Islands; above the freezing point over the United Kingdom generally, but as low as – 12° Fahr. to – 5° over Russia, – 1° at Neufahrwasser, + 1° at Lemberg and Vienna, 8° at Prague, 10° at Munich and Swinemunde. Rising later to between 40° and 48° on our western and southern coasts, to 50° or more in the west of France, and to 55° or more in Spain, the south-west of France, and the south of Italy. Not touching 40° on our north-east and east coasts.

Wind (1) North-Westerly in Norway, South-Westerly over Finland, Southerly in northern Russia; (2) variable from the westward over Scandinavia, South-Easterly in the north-west of France, Easterly and North-Easterly over the United Kingdom; (3) light and anticyclonic over Russia and south-eastern Europe. No important change occurring during day.

Barometer highest, 30·6 ins. and more to 30·0 ins. in an anticyclone lying over Russia and south-eastern Europe, and 30·0 ins. and more in another (small) system off the north of Scotland. Lowest 29·6 ins. and less over Lapland, and below 29·5 ins. in a depression over the Bay of Biscay. Latter system moving north-eastwards later and partially filling up; anticyclone in north increasing in height and spreading southwards and eastwards.

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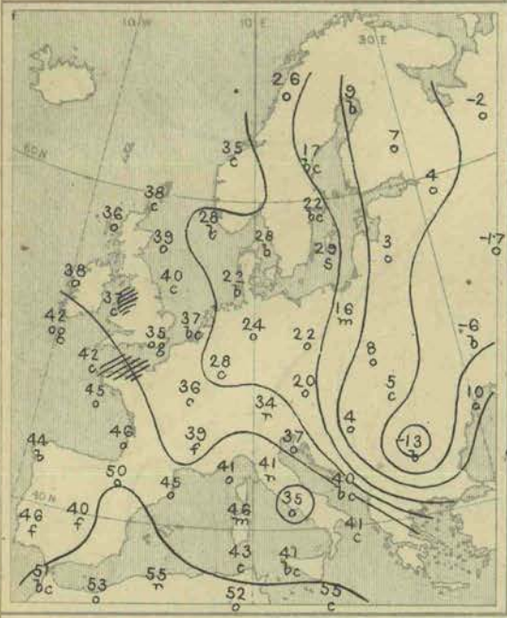
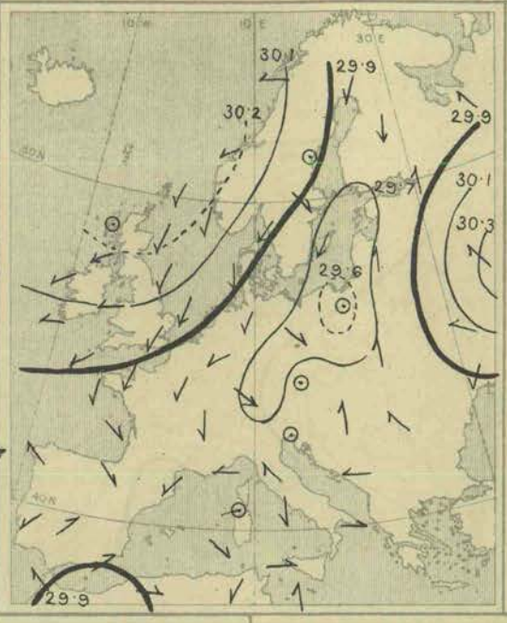
III.—SUMMARY OF WEATHER OVER EUROPE.

Tuesday, 10th January.

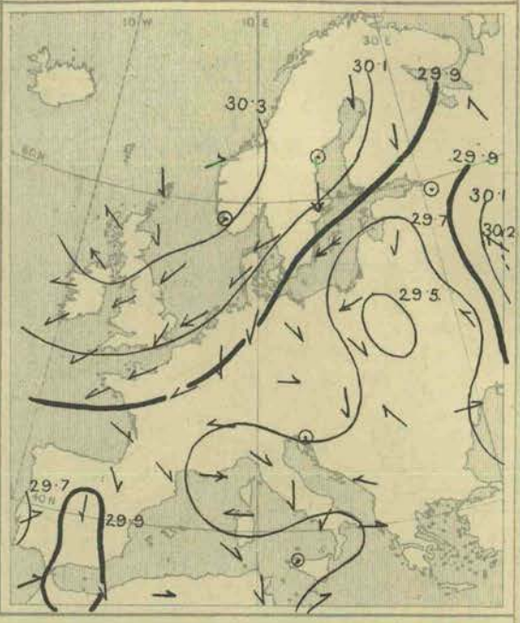
Temperature and Weather. — 8 a.m.



Barometer and Wind. — 8 a.m.



6 p.m.



Weather in morning rather showery at our south-eastern stations, but fair, as a whole, over the United Kingdom generally, and over the greater part of Scandinavia and Denmark; dull and unsettled over the Continent, with rain in several places, as well as at Algiers. Some cold showers later in Scotland and the east of England, rain in the south of France and at Lisbon, and snow in many parts of Poland and Germany.

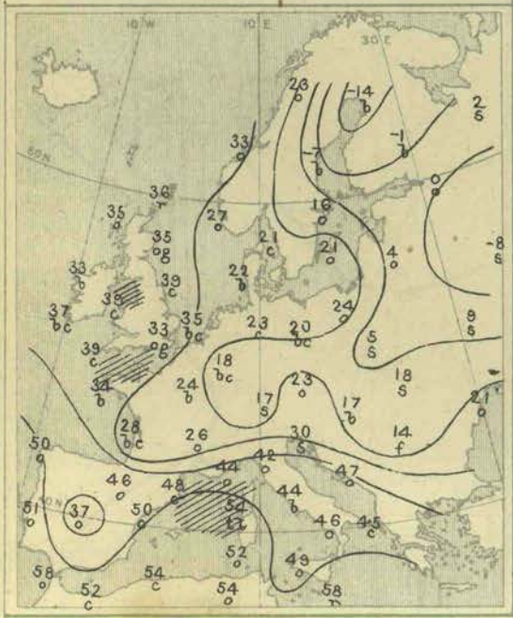
Temperature inclined to fall again over the British Isles and north-western Europe, as well as over central Russia, but risen decidedly over central Europe. Morning readings below 50°, except at some stations in the south-west of France, and on the Algerian coast, below 40° over the inland parts of France and the British Isles, below 20° over Austria, eastern Germany, and Finland, and below zero Fahr. over Russia. Lowest of all, – 17° Fahr. at Moscow, – 13° at Hermanstadt, – 6° at Kharkov and Kiev, – 2° at Archangel, and 0° zero at Riga. Rising to 39° or more over nearly the whole of our Islands later, and touching 57° at Perpignan and Lisbon. Exceeding 60° in the extreme southern parts of Spain and Italy.

Wind Northerly over Scandinavia, the Baltic, and the eastern shores of the North Sea, North-Easterly to Easterly over the British Islands, and moderate in force generally. Light Southerly over Hungary, Poland, the Baltic Provinces, and the Gulf of Finland, very variable elsewhere. Drawing into South-East on our north-western coasts later, little change elsewhere, but gale from the North-Eastward springing up at Wisby.

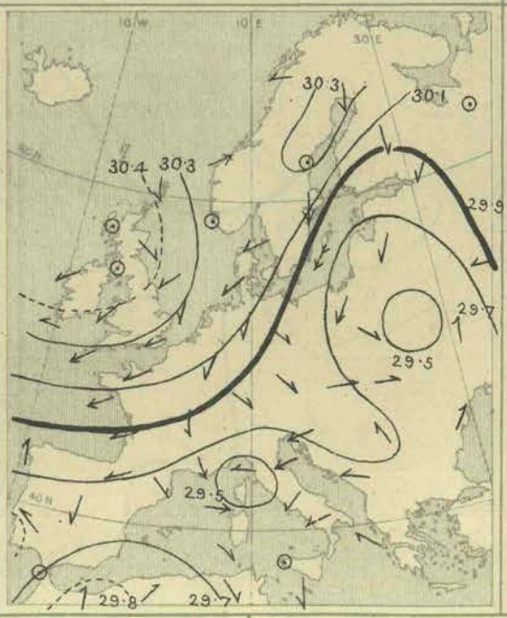
Barometer highest, 30·3 ins. and more to 30·0 ins. over central Russia, and 30·2 ins. and more to 30·0 ins. over Norway and the greater part of the British Islands. Exceeding 29·9 ins. over Morocco and the south of Spain. Lowest, 29·7 ins. to 29·6 ins. and less in a depression over north Germany and the Baltic, and below 29·8 ins. over the Mediterranean. Rising over the United Kingdom and western Europe all day. Baltic depression growing deeper and moving slowly southwards.

Wednesday, 11th January.

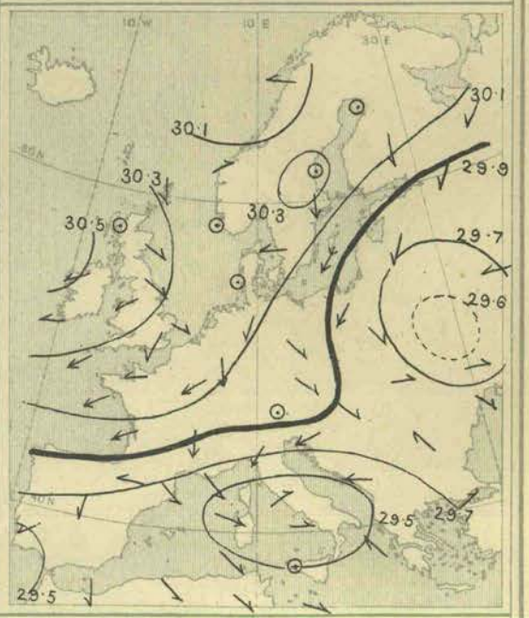
Temperature and Weather. — 8 a.m.



Barometer and Wind. — 8 a.m.



6 p.m.



Weather fair over western Europe generally, but dull in Scotland and Norway, rainy in the Shetlands. Dull over the eastern, central, and southern countries, with snow at most of the Russian stations, as well as at Munich. Rain falling at Tunis and Malta. A little rain or snow occurring during day in most parts of Great Britain, considerable rain over Sardinia and Italy, snow showers over central Europe.

Temperature fallen quickly in France, also in Sweden and northern Russia; risen considerably over Austria and the south of Russia, changed irregularly elsewhere. Morning readings, 58° at San Fernando and Malta, 54° at Algiers and La Calle, and 52° at Cagliari, Nemours, and Oran; reaching 50° on the Portuguese coast and 46° at Biarritz. Lowest, – 14° Fahr. at Haparanda, – 9° at Ulcaborg, – 8° at Moscow, and – 7° at Hernösand; below 10° in all but the southern parts of Russia, below 20° in Austria, south Germany, and Belgium, and below the freezing point over central England. Rising later to between 38° and 41° in most parts of the United Kingdom, but remaining considerably below the freezing point over Germany, Belgium, and some parts of central France.

Wind light to fresh from the Eastward or North-Eastward over England, Ireland, France, Denmark, and the Netherlands, strong from North-East over the Baltic, with a gale at Wisby. Light from North or North-West in Scotland, fresh from West-South-West at Christiansund, moderate from East at Bodö; North-Westerly or Westerly over Germany and Austria; Southerly in the south of Russia. Easterly in Italy, North-Westerly in the south of France, and also in Tunis; Southerly in Algeria. Subsequently backing to North-West in the east of England, no important change occurring elsewhere.

Barometer highest, 30·3 ins. to 30·5 ins. in an anticyclone covering the greater part of our Islands and the North Sea, 30·3 ins. and upwards in another system over the north of Sweden. Lowest, 29·5 ins. and less in two depressions, one lying over western Russia, the other over the Gulf of Genoa, 29·6 ins. and less in two other systems lying respectively to the southward of Italy and to the south-westward of Lisbon. Slight fall taking place over our Islands during day, as a shallow depression off the west of Norway spread southwards. Depression over Gulf of Genoa moving south-eastwards.

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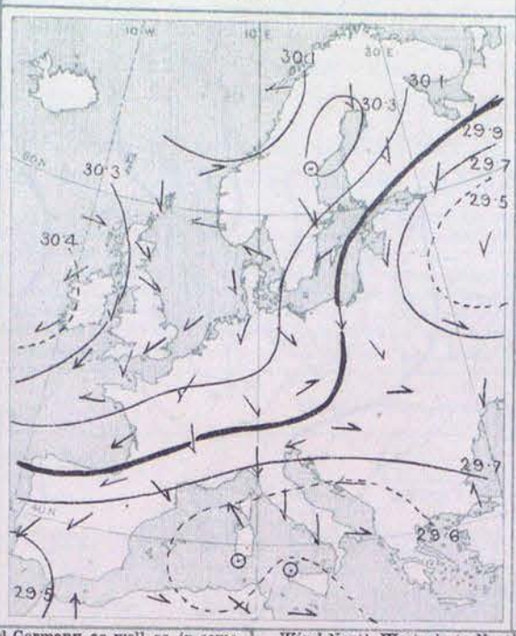
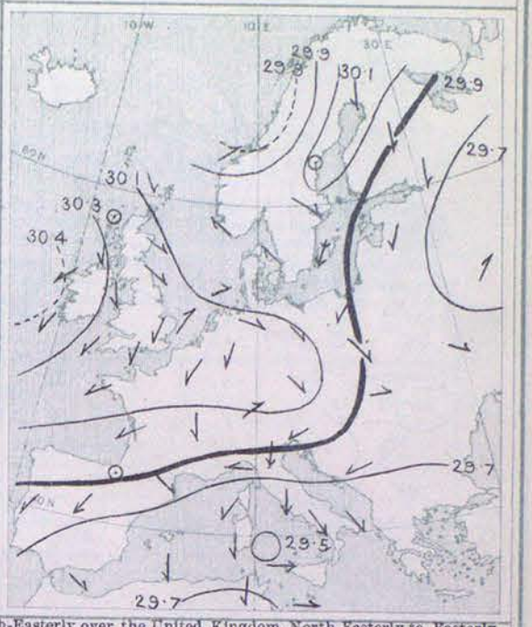
Thursday, 12th January.

Temperature and Weather. 8 a.m.

Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over many parts of France and Germany, as well as in some parts of Ireland, Finland, and the north of Sweden, cloudy or overcast, as a whole, elsewhere, with snow over northern and central Russia and at Hermanstadt, and slight rain and sleet showers in various parts of our islands. Similar showers occurring in many parts of western Europe during the day, but all of them slight. Heavy rain falling, however, in Algeria and some parts of Italy.

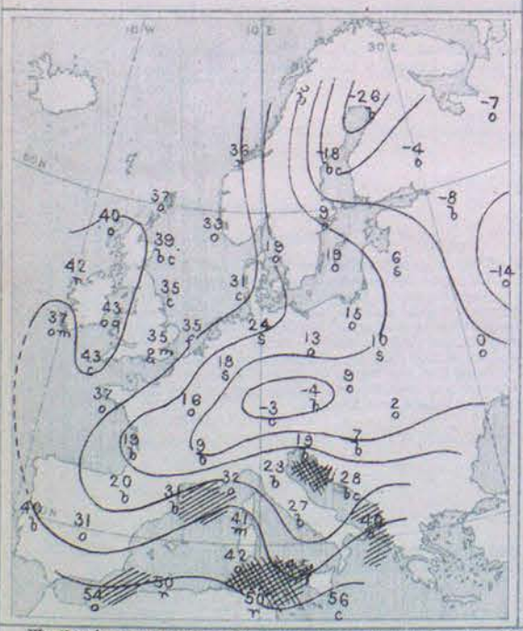
Temperature risen a little in many parts of the British Islands and Norway, fallen fast on the Continent. Morning readings exceeding 50° on the southern side of the Mediterranean only; below 40° over the greater part of the United Kingdom, much lower elsewhere. Lowest of all, (1) – 21° Fahr. at Haparanda, – 14° at Hernösand, – 2° at Knopio, and – 1° at Hangö; (2) – 3° at Kiev, + 1° at Munich, 5° at Buda-Pesth, 6° at Berlin. Rising later to between 35° and 39° over the greater part of England to between 40° and 45° over Ireland, and to 47° at Stornoway. Exceeding 50° in southern Italy, and reaching 66° at Palermo.

Wind North-Westerly to North-Easterly over the United Kingdom, North-Easterly to Easterly over the Bay of Biscay and Spain. Mainly Northerly over Finland and the Baltic, North-Westerly over south Germany and Austria-Hungary; somewhat strong from North-East on the northern shores of the Adriatic and the Mediterranean. Shifting to the Southward and South-Eastward temporarily on our extreme south-east coasts and in Holland during day, but afterwards changing to the Westward. Increasing to a strong breeze from the North-Eastward over northern Italy.

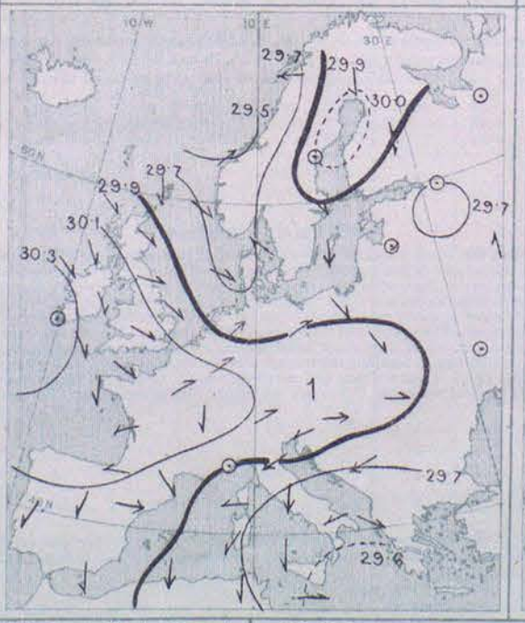
Barometer highest. (1) 30·4 ins. and more to 30·1 ins. over the British Isles, the north of France, and neighbouring parts of the Atlantic; (2) 30·3 ins. and more to 30·2 ins. over Sweden, Denmark, and Holland. Lowest, 29·6 ins. and less in a large shallow depression over central Russia and in a similar system over the Mediterranean, Italy and Greece; 29·5 ins. and less in another system advancing towards the south-west of Spain from the Atlantic, and rather below 30·1 ins in a very shallow disturbance off the north-west of Norway. Last-named depression growing much deeper later, but that near the south-west of Spain apparently filling up.

Friday, 13th January.

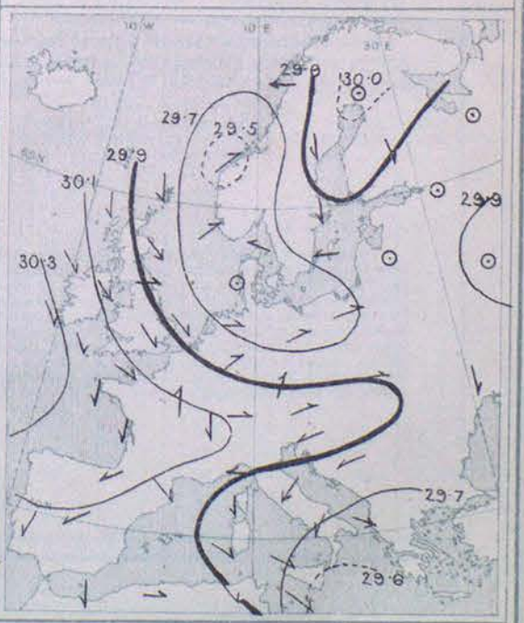
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fine and bright in the east of Scotland and the north of England, as well as in the north of Sweden, the south of France, Spain, Austria, and northern Italy. Dull in nearly all other localities, with passing showers in the north of Ireland, rain in Sicily, Tunis, and Algeria, and snow in Denmark, north Germany, Belgium and the north-east of France, as well as at Pesaro. Weather clearing later in many parts of the United Kingdom, but showers in most districts during the 24 hours, with snow in the north of Scotland.

Temperature risen slightly in our Islands, Denmark, and north Germany, but fallen elsewhere. Morning readings highest, 56° at Malta, 54° at Nemours and Oran, and 51° at La Calle; above 40° at several of our western and northern stations, and as high as 45° at Malin Head. Lowest, – 26° Fahr. at Haparanda, – 18° at Hernösand, – 14° at Moscow, and – 8° at St. Petersburg; below zero in many parts of Austria and south Germany, and below 10° in some parts of central France. Hard frost continuing over central Europe all day, but thermometer reaching 40° or more over England, and reaching 45° or more on many parts of our west and south-west coasts. Exceeding 55° in the south of Italy, but remaining below 32° in the north of that country.

Wind light to moderate from the North-Westward over our Islands; moderate to strong from the South-Westward in north Germany, and from the South-Eastward in Denmark, Northerly in Finland and Sweden; North-Westerly or Westerly in Poland and Austria; variable over south Germany. Strong from North-East in Italy, and light or moderate from the same quarter in Spain and the west of France, strong from North in Algeria. No important change occurring during day.

Barometer highest, 30·1 ins. to 30·4 ins. in an anticyclone extending from the Atlantic, over France, and all the more western parts of the United Kingdom; 30·0 ins. and upwards in another system lying over the Gulf of Bothnia. Lowest, 29·5 ins. and less in a depression off the west of Norway; 29·6 ins. and less in another disturbance lying to the southward of Italy; 29·7 ins. and less in a shallow system lying near St. Petersburg. Numerous small depressions appearing over Scandinavia, Denmark, and the eastern parts of the North Sea during day, and barometer falling in most parts of western Europe.

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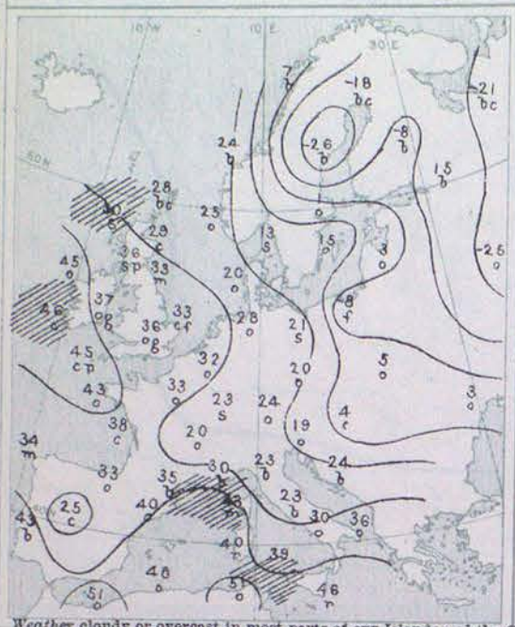
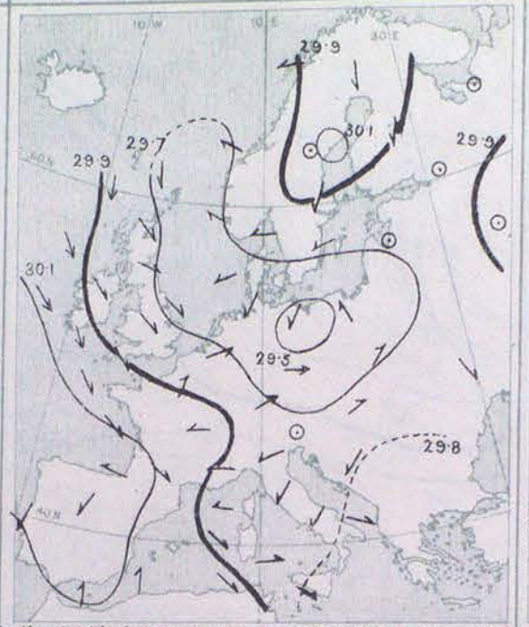
Saturday, 14th January.

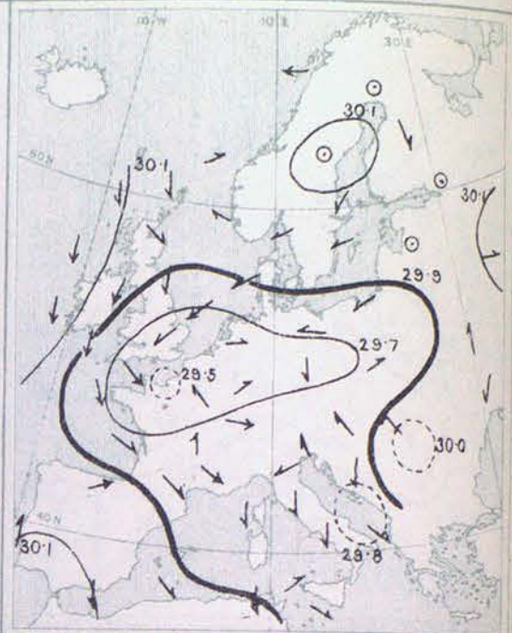
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather cloudy or overcast in most parts of our Islands and the Continent, with showers of rain or sleet at several of our western stations, and with snow in the north of Scotland, as well as in some parts of Denmark and Germany. Fine and bright over the northern parts of Russia and Scandinavia, as well as in Spain, northern Italy, and the south of France, but rain falling at Cagliari, Tunis, and Malta. Snow falling later in many parts of western Europe, heavily in Wales, the south-west of England, and the central parts of France.

Temperature risen rapidly in Germany and central France, fallen in most other countries. Morning readings highest, (1) 51° at Nemours, Oran, and La Calle, and 48° at Algiers; (2) 46° at Valencia Island and 45° at Belmullet, Scilly and Jersey. Lowest, – 26° Fahr. at Hernösand, – 25° at Moscow, – 21° at Archangel, and – 15° at St. Petersburg; below zero over the northern parts of Russia and Sweden generally; below 10° in Austria, and below 20° even over northern Italy. Decided fall taking place later over the southern parts of England, and daily maxima below 40° in most parts of Great Britain. Thermometer exceeding 50° in Spain, as well as at Palermo and Malta, but not reaching 40° over the northern parts of Italy, and remaining as low as 28° at Pesaro.

Wind light to fresh from the North-Westward over our Islands and the greater part of France Westerly or South-Westerly over the Netherlands, central France, and the western and southern parts of Germany, but Easterly or North-Easterly over Denmark, the Baltic, and the greater part of Scandinavia. North-Easterly in Spain and Italy, but varying between South and West in Algeria. Subsequently veering to the Northward or North-Eastward in our Islands, and increasing to a gale on our western and southern coasts.

Barometer highest, 30·1 ins. and upwards in a large anticyclone lying over Spain and the Bay of Biscay; 30·0 ins. and upwards in a smaller system lying over the Gulf of Bothnia. Lowest, 29·5 ins. and less in a depression over Germany; small secondary disturbances lying over various parts of Great Britain and the North Sea. Main depression and secondary systems subsequently uniting and forming one complex disturbance over the Netherlands and the north of France; barometer rising briskly in the west and north of our Islands.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force is indicated thus: ⇛⟶ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the left-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Germany, Sweden, and Norway, and 7 a.m. in France, Algeria, Italy, Austria, and Russia; that for 6 p.m. is prepared from observations made at 6 p.m. in the British Islands and France, 7 p.m. in Algeria, 8 p.m. in Sweden and Norway, Germany, and Austria, and 9 p.m. in Russia, Belgium, and Italy. The time indicated in each case is the standard time for each country.

GENERAL NOTES.

The strongly marked anticyclone noticed over Russia last week dispersed gradually during the opening days of this period, but a new high-pressure area soon appeared over the northern parts of our Islands and the adjacent portions of Norway and the Atlantic. The latter system ultimately split into two parts, one of which settled down over the Gulf of Bothnia, while the other, and by far the larger part, after spreading southwards over the whole of the United Kingdom, passed away to the westward. During the prevalence of the Russian anticyclone a depression skirted our south-west coasts in a south-easterly direction, and travelled away across France to the Mediterranean, its progress being attended by strong Easterly winds or gales in many parts of our Islands. The conditions over western Europe then became anticyclonic, the wind gradually backing from the North-Eastward to the Northward or North-Westward, and falling light or moderate. During the latter part of the week, however, a large depression was gradually formed over the North Sea, Denmark, and Germany, while secondary disturbances were developed over various parts of our Islands. These systems ultimately united, and, at the close of the period, a well-defined, though rather complex depression, was shown over the south of our Islands and the north of France, gales from the Northward or North-Eastward being prevalent on many parts of our western and southern coasts. Over our Islands temperature was considerably higher than it had been during the previous fortnight, but on the Continent, hard frost continued to prevail the weather being especially severe in Sweden, Russia, and Austria.

BRIGHT SUNSHINE Values for the Week in addition to those found on page 8.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	6·7	?	13	?	EASTBOURNE				
OSWALDKIRK (Yorkshire)	5·1	?	10	?	TENBY	4·8	?	9	?
WORKSOP	3·5	- 3·9	7	- 7	NEWQUAY	13·0*	?	24*	?
THURCASTON (Leicestershire)	8·6	+ 2·3	16	+ 4	TORQUAY	12·0	?	21	?
MARGATE	5·0	?	9	?	ARLEY COTTAGE (County Cavan)	9·2*	?	16*	?
WESTBOURNE (Sussex)	6·0*	?	11*	?	GUERNSEY	10·0	?	19	?
BRIGHTON	3·2	?	6	?		3·2*	?	6*	?

The values at Westbourne, Tenby, Torquay and Guernsey are obtained by Jordan's Photographic Recorder.

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WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; R. H. SCOTT, F.R.S., SECRETARY.

By whom Subscriptions, payable in advance, can be received.

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VOL. X. No. 3.] *Third Series.*

WEEK ENDING SATURDAY, 21ST JANUARY, 1893.

[*Price 6d.*
[*Annual subscription, post paid, £1 10s. 0d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871-90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty-five years 1866-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90, only. BRIGHT SUNSHINE.—*The Mean values* employed are those for the corresponding periods in the ten years 1881-90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

	DISTRICTS. (See p. 14.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 1st, 1893. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	50	24	43·5	33·5	38·7	0 (average)	4	− 4	32	− 1	4	− 21	184	+ 84
	1. SCOTLAND, EAST	52	27	44·1	33·0	38·8	2 above.	6	− 2	35	− 5	6	− 21	191	+ 71
	2. ENGLAND, N.E.	50	24	42·4	32·5	37·7	1 below.	1	− 6	35	− 3	1	− 20	173	+ 60
	3. ENGLAND, EAST	44	17	38·2	27·8	33·2	5 below.	0	− 7	62	+18	0	− 21	227	+ 94
	4. MIDLAND COUNTIES	47	18	41·5	30·5	36·2	2 below.	0	− 9	41	− 3	0	− 28	215	+ 82
	5. ENGLAND, SOUTH	47	17	40·0	30·3	35·4	4 below.	0	−10	46	+13	0	− 30	203	+100
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	50	26	45·4	35·8	40·8	1 above.	10	+ 1	25	− 5	10	− 22	157	+ 68
	7. ENGLAND, N.W.	50	27	43·5	35·6	39·7	0 (average)	4	− 4	25	− 6	4	− 22	154	+ 63
	8. ENGLAND, S.W.	51	24	44·9	34·6	40·0	2 below.	8	− 7	30	+ 7	8	− 36	141	+ 71
	9. IRELAND, NORTH	51	25	46·7	38·4	42·7	2 above.	20	+ 6	10	−16	20	− 24	111	+ 34
	10. IRELAND, SOUTH	52	23	43·3	37·3	43·0	0 (average)	27	+ 7	13	− 7	27	− 35	88	+ 28
	— CHANNEL ISLANDS	50	29	47·9	39·5	43·9	0 (average)	24	+ 3	7	− 3	31	− 32	68	+ 36

Rainfall.

	DISTRICTS. (See p. 14.)	For the Week. Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 1st, 1893. Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.
			10ths of In.	10ths of In.			Ins.	Ins.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	7	18	5 more.	15	0	2·4	− 1·4
	1. SCOTLAND, EAST	6	7	0 (average)	15	+ 5	1·4	− 0·6
	2. ENGLAND, N.E.	4	4	0 (average)	14	+ 4	1·1	− 0·2
	3. ENGLAND, EAST	5	5	1 more.	15	+ 5	1·2	− 0·1
	4. MIDLAND COUNTIES	5	2	3 less.	12	+ 2	0·8	− 0·9
	5. ENGLAND, SOUTH	4	5	1 less.	12	+ 2	1·4	− 0·5
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	5	5	8 less.	11	− 2	0·8	− 3·2
	7. ENGLAND, N.W.	5	3	4 less.	11	0	0·7	− 1·5
	8. ENGLAND, S.W.	4	3	6 less.	10	− 2	1·3	− 1·6
	9. IRELAND, NORTH	6	7	1 less.	14	+ 1	1·6	− 0·9
	10. IRELAND, SOUTH	4	4	6 less.	11	− 1	2·2	− 0·7
	— CHANNEL ISLANDS	4	4	4 less.	13	0	2·1	− 0·3

Bright Sunshine.

	DISTRICTS. (See p. 14.)	For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 1st, 1893. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	2	− 4	3	−10	22	+ 5	15	+ 3
	1. SCOTLAND, EAST	7	− 1	14	− 3	17	−14	11	−11
	2. ENGLAND, N.E.	8	+ 1	15	+ 1	22	+ 2	14	+ 1
	3. ENGLAND, EAST	6	− 5	11	− 8	22	− 6	13	− 4
	4. MIDLAND COUNTIES	9	− 3	15	− 8	27	+ 2	16	0
	5. ENGLAND, SOUTH	4	− 4	7	− 6	21	− 5	12	− 3
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	10	+ 1	19	+ 5	34	+12	22	+ 8
	7. ENGLAND, N.W.	7	+ 1	13	+ 4	21	− 1	13	− 1
	8. ENGLAND, S.W.	17	+ 5	28	+10	41	+ 8	24	+ 5
	9. IRELAND, NORTH	6	− 6	11	− 7	24	− 4	15	− 2
	10. IRELAND, SOUTH	8	− 5	15	− 6	25	−11	15	− 7
	— CHANNEL ISLANDS	8	− 7	14	−12	26	−21	15	−12

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather was cloudy or dull in almost all parts of the Kingdom, with frequent, but not heavy, falls of rain, sleet, or snow. In the south-western and western parts of England, however, the conditions were often fine and bright.

Temperature exceeded the mean in Scotland E. and W. and in Ireland N., and just equalled it in Scotland N., England N.W., Ireland S., and the Channel Islands; elsewhere it continued below the mean, the deficit ranging from 1° in England N.E., to 4° in England S., and 5° in England E. The highest of the maxima were registered on the 18th, when the thermometer rose to 52° in Scotland E. and Ireland S., and to 50° or 51° in most other districts; over the Midland Counties and Ireland S., however, the highest reading was 47° and in England E. 44°. The lowest of the minima were recorded during the earlier part of the period, and ranged from 17° in England E. and S., and 18° in the Midland Counties, to 27° in England N.W. and Scotland E., and 29° in the Channel Islands.

Rainfall exceeded the mean in Scotland N. but did not differ much from it in Scotland E., and England N.E. and E.; in all other districts the fall was deficient, and in Scotland W., England S.W., and Ireland S. the deficiency was large.

Bright Sunshine exceeded the mean in Scotland W. and England S.W., N.W. and N.E., but was very little prevalent elsewhere. The percentage of the possible duration ranged from 28 in England S.W. to 7 in England S., and to 3 in Scotland N.

Barometer and Wind.—During the whole of this period the barometer was highest off our western or south-western coasts, and lowest in the north or north-east. No important depressions passed directly over us, but several small systems (subsidiary to large disturbances lying to the northward of Scotland or over Scandinavia) appeared in different parts of our Islands and over the North Sea. The winds were generally North-Westerly, but during the latter part of the week they backed more to the Westward. In force they were, as a rule, moderate to fresh, but increased considerably at times on our northern and north-western coasts, where on the 17th they attained the force of a gale.

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II.– DATA from which the SUMMARY on page 13 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°				Inches	Inches.	*	*	*	*
0. SCOTLAND, N.	Sumburgh Head	47	25	43·1	32·1	37·8	– 1·5	3	37	7	1·59	+0·74	*	*	*	*
	Stornoway	49	27	45·0	34·6	40·0	+ 0·3	8	29	7	1·02	–0·18	1·5	– 4·7	3	–10
	Wick	49	28	44·1	33·0	38·8	+ 0·7	6	35	6	1·33	+0·87	*	*	*	*
	Lairg	48	24	41·8	32·5	37·2	+ 0·9	0	34	7	1·25	+0·46	*	*	*	*
	Glencarron	47	29	42·4	33·5	38·1	+ 0·6	1	31	7	5·03	+2·75	*	*	*	*
	Fort Augustus	50	28	43·4	34·4	39·1	+ 0·2	4	29	7	0·64	–0·40	0·5	?	1	?
	Fort William	49	26	45·0	34·4	39·9	+ 0·2	8	30	7	1·36	–0·89	2·6	?	5	?
1. SCOTLAND, E.	Nairn	52	28	46·7	33·3	40·3	+ 2·5	13	36	6	0·56	+0·12	*	*	*	*
	Aberdeen	49	29	43·9	33·6	39·0	+ 0·9	5	32	6	0·93	+0·41	10·5	– 1·8	21	– 3
	Braemar	45	27	41·1	31·6	36·5	+ 1·7	0	39	6	0·77	+0·07	3·7†	?†	7†	?†
	Ochtertyre	50	27	45·9	32·4	39·4	+ 2·7	11	38	5	0·16	–1·01	*	*	*	*
	Leith	50	30	45·6	35·1	40·6	+ 1·4	10	28	5	0·19	–0·26	*	*	*	*
	Marchmont	46	28	41·4	32·1	36·9	+ 0·2	0	36	5	1·36	+0·76	8·0	?	15	?
2. ENGLAND, N.E.	Alnwick Castle	50	26	44·9	33·9	39·6	+ 1·6	8	32	6	0·76	+0·28	*	*	*	*
	Durham	49	25	42·6	32·5	37·8	+ 0·7	2	35	5	0·30	–0·18	11·3	+ 1·2	21	+ 3
	Shields	49	28	43·7	32·4	38·3	– 0·6	5	37	5	0·44	+0·04	*	*	*	*
	Scarborough	48	27	42·6	33·3	38·1	– 0·8	2	32	3	0·24	–0·20	*	*	*	*
	York	48	24	42·4	30·7	36·8	– 1·2	1	42	4	0·30	–0·11	6·2	– 0·3	11	0
	Spurn Head	40	29	38·4	32·0	35·3	– 2·9	0	47	3	0·24	–0·06	*	*	*	*
3. ENGLAND, E.	Hillington	41	20	38·1	27·0	32·8	– 4·4	0	64	6	0·54	+0·12	6·0	– 4·1	11	– 6
	Yarmouth	40	21	35·9	27·9	32·1	– 5·8	0	69	5	0·75	+0·31	*	*	*	*
	Geldeston	41	17	37·1	26·2	31·9	– 6·6	0	71	5	0·54	+0·18	5·0	– 7·2	9	–12
	Cambridge	44	22	40·0	28·7	34·6	– 3·1	0	52	4	0·41	+0·05	7·0	– 4·3	12	– 7
	Rothamsted	43	21	39·7	29·3	34·7	– 2·7	0	51	6	0·46	–0·13	7·2	?	13	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	46	26	42·9	31·7	37·5	– 0·3	3	38	5	0·42	0·00	*	*	*	*
	Loughborough	46	21	42·1	29·6	36·1	– 1·9	0	45	6	0·28	–0·17	*	*	*	*
	Stamford (Ketton Hall)	44	21	40·4	29·3	35·1	– 2·7	0	48	5	0·25	–0·17	*	*	*	*
	Cheadle	45	25	40·0	31·4	35·9	– 0·9	0	43	7	0·29	–0·31	*	*	*	*
	Churchstoke	46	20	42·2	30·7	36·7	– 1·5	1	41	4	0·05	–0·60	8·9	– 1·3	16	– 2
	Hereford	47	21	43·2	30·5	37·1	– 1·8	3	43	4	0·08	–0·49	*	*	*	*
	Cirencester	45	18	40·2	29·3	35·3	– 2·6	0	47	4	0·19	–0·51	11·3	+ 0·9	20	+ 2
	Oxford	45	25	40·1	31·6	36·0	– 2·8	0	42	4	0·25	–0·26	8·6	– 0·7	15	– 1
5. ENGLAND, S.	London	44	24	39·4	30·6	35·2	– 4·0	0	48	4	0·48	–0·01	3·8†	– 2·4†	7†	– 2†
	North Foreland	41	23	37·1	29·1	33·3	– 6·0	0	61	4	0·61	?	*	*	*	*
	Strathfield Turgiss	44	21	39·6	29·7	34·9	– 3·3	0	50	4	0·48	–0·07	*	*	*	*
	Dungeness	43	19	38·1	28·1	33·3	– 5·7	0	61	6	0·42	–0·18	*	*	*	*
	Hastings (St. Leonards)	46	25	39·9	30·2	35·2	– 4·9	0	48	5	0·59	+0·36	3·2	–10·0	6	–16
	Southampton	47	23	42·0	31·3	36·9	– 3·1	0	36	2	0·29	–0·46	9·6	– 1·0	17	– 1
	Hurst Castle	47	23	42·6	32·7	37·9	– 2·9	2	35	3	0·42	–0·26	*	*	*	*
	Stowell	44	17	41·1	30·6	36·1	– 2·6	0	41	6	0·23	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	50	28	46·1	35·3	40·9	+ 0·6	11	28	7	1·47	–0·55	*	*	*	*
	Glasgow	48	28	44·0	35·8	40·1	+ 1·5	6	25	3	0·22	–0·73	7·0	+ 1·8	13	+ 4
	Ardrossan	49	26	46·3	35·4	41·1	+ 0·6	12	28	5	0·16	–0·81	*	*	*	*
	Glenlee	49	26	44·5	35·1	40·0	+ 2·5	7	27	6	0·46	–1·32	*	*	*	*
	Douglas (Isle of Man)	50	31	46·1	37·3	41·9	+ 1·4	11	21	5	0·41	–0·64	13·2	+ 3·9	24	+ 7
7. ENGLAND, N.W.	Newton Reigny															
	Stonyhurst	46	28	41·6	33·9	37·9	– 0·2	0	29	6	0·64	–0·27	10·0	+ 2·5	18	+ 4
	Blackpool															
	Manchester	46	27	42·1	33·1	37·8	– 0·3	0	33	5	0·30	–0·40	1·2†	?†	2†	?†
	Liverpool Obsy. (Bidston)	47	30	42·9	34·4	38·8	– 1·0	3	28	4	0·22	–0·27	*	*	*	*
	Llandudno	48	31	44·7	37·6	41·3	– 0·3	8	18	4	0·24	–0·39	10·5	+ 2·0	19	+ 3
	Holyhead	50	33	46·4	39·1	42·9	+ 0·7	18	8	4	0·31	–0·45	*	*	*	*
8. ENGLAND, S.W.	Llandovery	47	25	43·9	31·0	37·7	– 2·8	5	42	7	0·33	–0·87	*	*	*	*
	Pembroke	48	31	46·7	39·3	43·2	+ 0·5	20	8	5	0·39	–0·46	20·2	+ 9·0	35	+15
	Arlington (N. Devon)	46	25	42·7	32·9	38·0	– 1·5	2	34	5	0·54	–0·46	*	*	*	*
	Cullompton	49	24	44·2	32·0	38·3	– 1·8	6	38	3	0·08	–0·89	14·5	+ 6·1	25	+10
	Falmouth	49	30	46·0	37·9	42·1	– 1·8	18	11	4	0·26	–0·97	15·0	+ 4·2	25	+ 7
	Plymouth	49	28	45·0	35·8	40·6	– 1·5	8	25	4	0·25	–0·66	14·7	+ 4·7	24	+ 7
	Prawle Point	51	26	45·7	33·3	39·8	– 2·2	10	35	3	0·34	–0·37	*	*	*	*
9. IRELAND, N.	Malin Head	47	32	46·1	40·0	43·2	+ 2·6	17	6	7	0·72	?	*	*	*	*
	Londonderry	50	32	46·6	39·1	43·0	+ 2·8	19	8	7	1·09	+0·17	*	*	*	*
	Edenfel (Omagh)	49	30	45·7	37·0	41·5	+ 2·3	10	21	6	0·99	+0·19	*	*	*	*
	Mullaghmore	49	33	47·4	39·4	43·6	+ 1·5	22	7	7	0·66	–0·31	*	*	*	*
	Belmullet	50	34	49·1	40·6	45·0	+ 2·0	27	4	7	0·58	?	*	*	*	*
	Markree Castle	51	30	46·5	38·3	42·6	+ 2·6	20	10	7	1·06	+0·26	5·3	– 4·9	10	– 7
	Brookeborough	50	28	45·4	36·7	41·2	+ 2·6	10	22	6	0·71	–0·28	*	*	*	*
	Armagh	49	25	44·9	36·5	40·9	+ 1·7	8	23	5	0·38	–0·27	4·7	– 5·5	9	– 8
	Donaghadee	51	32	46·3	38·3	43·5	+ 3·3	28	10	5	0·36	–0·30	*	*	*	*
	Edgeworthstown	?	27	?	35·6	?	?	?	?	4	0·51	–0·17	*	*	*	*
10. IRELAND, S.	Dublin	51	30	46·9	38·5	42·9	+ 0·9	21	10	4	0·34	–0·16	9·1	– 3·1	16	– 6
	Parsonstown	50	23	48·1	34·0	41·3	+ 1·1	17	34	3	0·45	–0·25	7·7	– 3·6	14	– 6
	Kilkenny	51	27	47·9	35·9	42·1	+ 0·8	26	17	5	0·47	–0·33	*	*	*	*
	Waterford	51	28	48·2	35·6	42·1	– 0·7	28	18	4	0·30	–0·64	*	*	*	*
	Roche's Point	51	32	48·7	38·9	44·0	+ 0·3	27	9	1	0·10	–1·04	*	*	*	*
	Valencia	51	30	49·9	40·1	45·2	+ 0·1	30	5	4	0·21	–1·29	8·0	–5·3	14	– 8
	Killarney	52	23	48·5	35·5	42·3	– 1·5	29	18	4	0·49	?	*	*	*	*
	Foynes	50	34	48·3	39·9	44·3	+ 1·9	25	6	5	0·43	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	50	37	49·0	41·0	45·2	– 0·9	27	3	3	0·36	–0·49	*	*	*	*
	Jersey	50	29	46·7	38·0	42·5	+ 0·3	20	11	5	0·35	–0·35	8·2	– 7·0	13	–12

Stations marked ⚓ are in connection with the Royal Meteorological Society, and those marked S with the Scottish Meteorological Society.

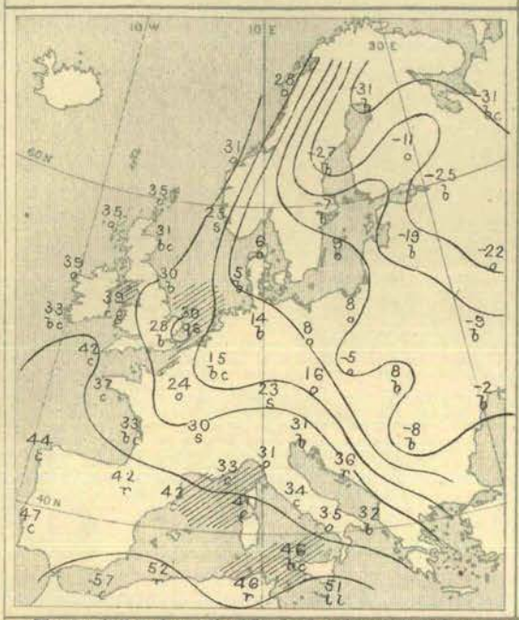
* An asterisk is inserted in all places for which the information is not usually received.

† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

Sunday, 15th January.

Temperature and Weather.

8 a.m.

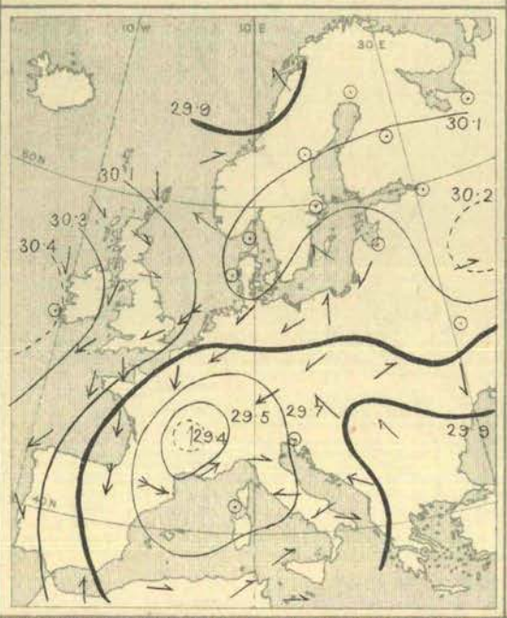


Weather dull in the north of Scotland, and squally, with snow, in the south-east of England, fine and bright over the greater part of our Islands. Fine also over northern Europe; the Netherlands, western Germany, and the south of Italy; dull in other parts of the Continent, with rain in some parts of southern Europe and Algeria, and snow in Germany and central France. Thunderstorm reported at Malta. Rain later over all the western and northern parts of the United Kingdom, and large quantities on the shores of the Mediterranean, remaining fair in the south and east of our Islands, northern and central France.

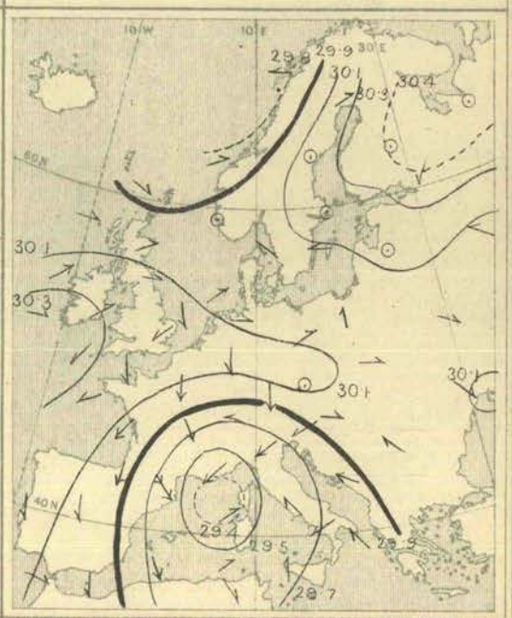
Temperature risen slightly in Scotland and more decidedly over southern Europe; fallen elsewhere. Morning readings highest, 57° at Oran, 53° at Nemours, 52° at Algiers, and 51° at Malta. Lowest, – 31° Fahr. at Archangel and Haparanda, – 27° at Hernösand, – 25° at St. Petersburg, and – 22° at Moscow, and below zero over Sweden and Russia generally, as well as at some of the German and Austrian stations; below the freezing point in most parts of Europe. Frost continuing all day in the south-east of England, but brisk rise of temperature taking place on our west and north-west coasts.

Barometer and Wind.

8 a.m.



6 p.m.



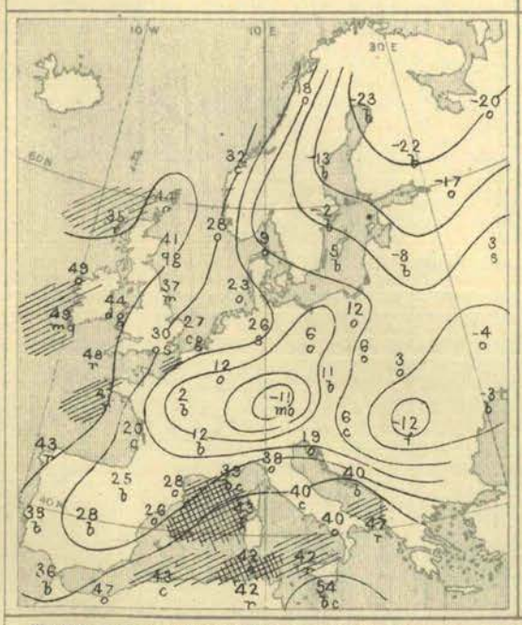
Wind light from the North-Westward in Scotland and from the Northward in Ireland. Strong to a gale from the North-Eastward in the south and south-east of England, and from the Northward over the greater part of France, Westerly or Southerly in the south of France. Calm or light and variable over Scandinavia, Denmark, and northern and central Russia. Easterly at most of the Italian stations, but varying between South and West in Algeria. Subsequently backing to the Westward or South-Westward in the north and west of our Islands; gales in south-east subsiding entirely.

Barometer highest, 30·4 ins. and upwards in an anticyclone lying off the west of Ireland; 30·2 ins. and upwards in another system over central Russia. Lowest, 29·4 ins. and less in a depression lying over France, with its centre near Lyons; gradients steep on its northern and western sides. Depression subsequently travelling away to the Mediterranean and partially filling up, new disturbance beginning to approach our northern coasts and causing the barometer to fall briskly in Scotland and the north of Ireland.

Monday, 16th January.

Temperature and Weather.

8 a.m.

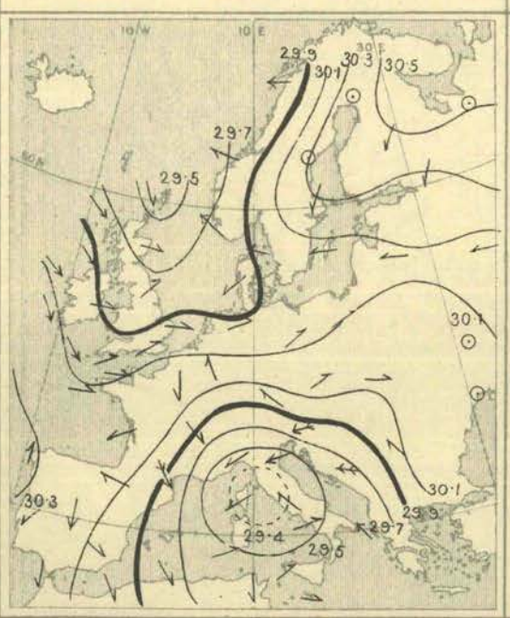


Weather in morning fine and bright over Finland, Sweden, and the northern half of the Baltic, as well as over central France, some parts of Spain and south-eastern Europe, cloudy or overcast elsewhere, with rain over the western and north-western parts of the United Kingdom, as well as on the southern side of the Mediterranean, snow over central Algeria. Some sleet and rain later over the greater part of the United Kingdom and north Germany—most in the north-east of Scotland—heavy rain over the Adriatic and south of Italy.

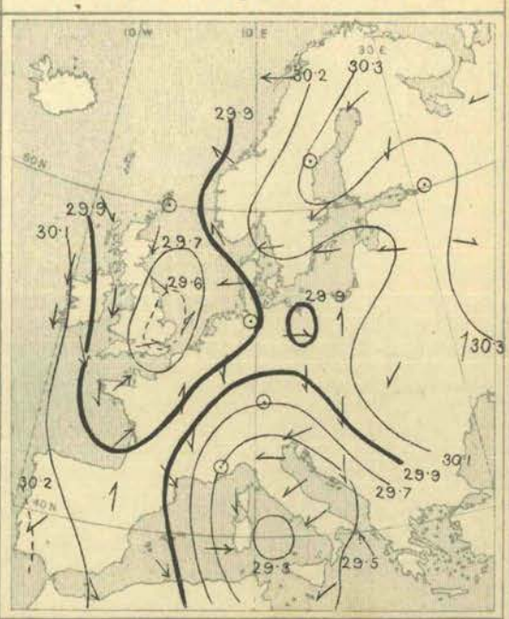
Temperature changing frequently and considerably—risen very fast over Scotland and Ireland, as well as over central Russia, fallen rapidly—to an unusually low value—over France. Morning readings highest, 54° at Malta, 46° to 49° in Ireland, 48° at Scilly, 45° at Nairn, 44° at Sumburgh Head. Lowest, – 17° to – 23° Fahr. over Finland and northern Russia, – 3° to – 14° over southern Russia; – 11° at Munich, + 1° at Wiesbaden, 2° at Paris, 6° at Berlin; 25° at Biarritz, 26° at Barcelona, 28° at Madrid and Perpignan, 29° at Aumale. Rising considerably over England and France during the day; frost giving way over England.

Barometer and Wind.

8 a.m.



6 p.m.



Wind (1) strong from North-West over the north-western and western parts of the United Kingdom, moderate from South-West in the south and east, strong from the Eastward over Norway, calm in Sweden; (2) blowing a gale from the Eastward over Dalmatia and the Adriatic, moderate North-Easterly over the Riviera, blowing a gale from North-West at Perpignan, and a Westerly to South-Westerly breeze on the southern side of the Mediterranean. Increasing to a gale from North on our western coasts later, but moderating over southern Europe.

Barometer highest, (1) 30·3 ins. in the north-west of Spain and ranging between that value and 30·1 ins. over the Bay of Biscay, the western and central parts of France and the extreme south-west of Ireland; (2) 30·5 ins. to 30·1 ins. over northern Europe. Lowest, 29·5 ins. and less over the Shetlands and their immediate neighbourhood, and 29·4 ins. and less in a well-formed depression over Corsica and the neighbouring parts of the Mediterranean. Depressions both moving southwards rapidly during day, that over the Mediterranean becoming complex.

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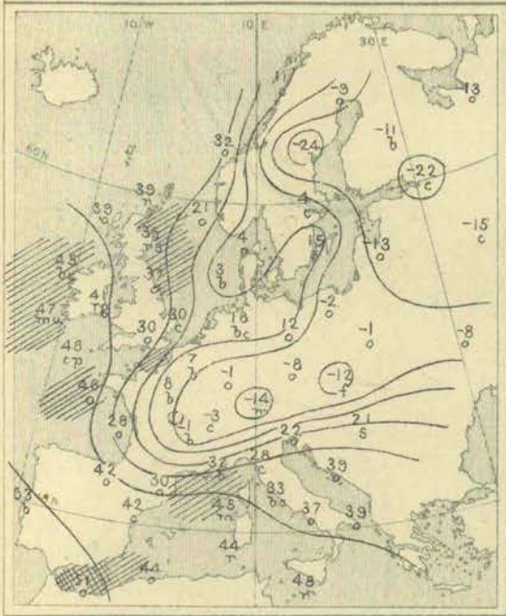
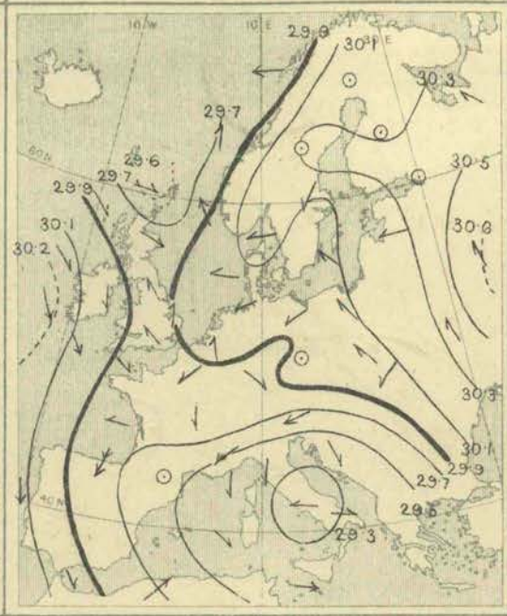
III.—SUMMARY OF WEATHER OVER EUROPE.

Tuesday, 17th January.

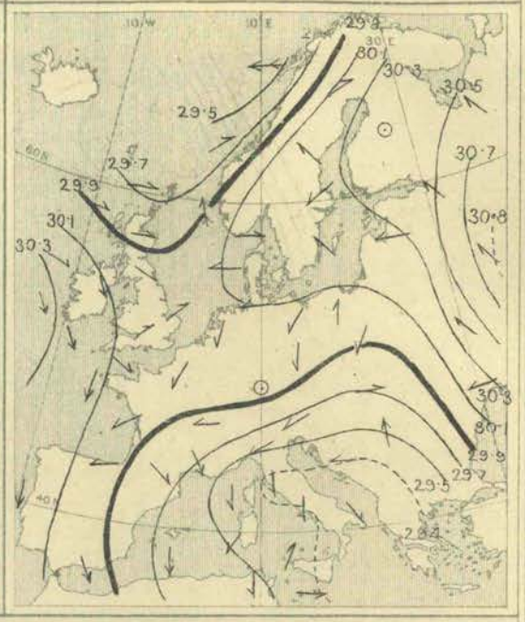
Temperature and Weather. — 8 a.m.



Barometer and Wind. — 8 a.m.



Barometer and Wind. — 6 p.m.



Weather in morning fine and bright over northern Europe, as well as over Denmark, many parts of France, and the south-west of Spain; very dull elsewhere, with rain over the northern and western parts of the United Kingdom, snow in the east of Scotland. Some snow, sleet, and rain over our Islands during day, as well as in the Netherlands, and the north and west of France; over the south-western parts of the United Kingdom, however, the weather was, as a whole, fair.

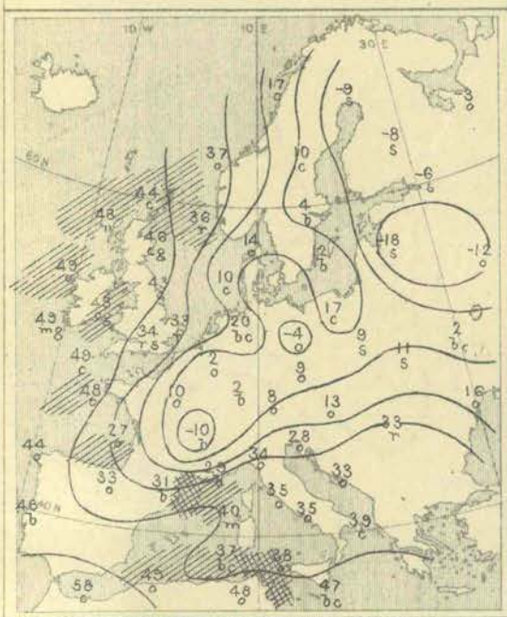
Temperature changing fitfully—fallen over Scotland and Scandinavia. Morning readings highest, 44° to 51° on the southern shores of the Mediterranean, 43° to 47° on the Irish coasts, and 39° at Sumburgh Head, Stornoway, and Leith. Lowest, – 24° Fahr. at Hernösand, – 22° to – 5° over Finland, Russia, and south Germany, – 1° at Wiesbaden, + 7° at Brussels, 8° at Paris, 25° at the North Foreland, 29° at Cambridge. Changing very fitfully and irregularly later, but remaining very cold over central Europe.

Wind variable and anticyclonic over the greater part of the Continent, but Southerly to Easterly on the Norwegian coast and at Fanö, Southerly in the east and south-east of England. Strong from North and North-North-West over Scotland, Ireland, Wales, the west of England, and the Bay of Biscay (a hard gale at Biarritz), North-Easterly to Northerly on the northern shores of the Mediterranean, South-Westerly over Algeria. Moderating later on our western coasts, and backing Westward in the north-west. Little change elsewhere.

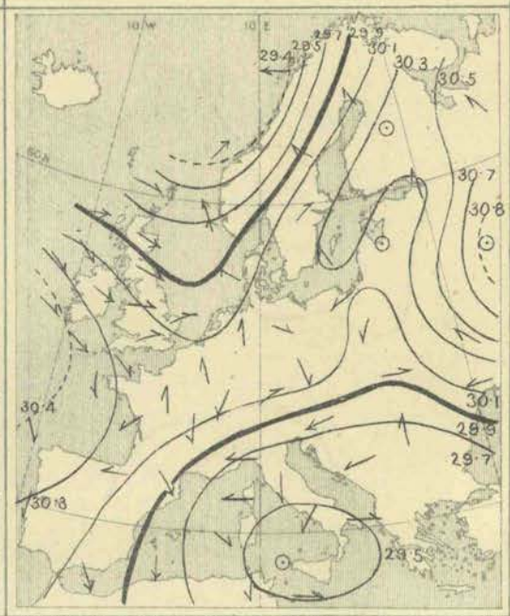
Barometer highest, (1) 30·6 ins. and more to 30·0 ins. in an anticyclone covering Russia, the Baltic, Sweden, and Denmark; (2) 30·5 ins. and more to 30·0 ins. over Ireland, Portugal, the west of Spain, and adjacent parts of the Atlantic. Lowest, 29·6 ins. and less in a depression over the Shetlands, 29·3 ins. and less in another over the south of Italy, and below 29·4 ins. in a secondary over the northern parts of Corsica and Gulf of Genoa. Rising over our Islands and France later; both depressions showing signs of dispersing.

Wednesday, 18th January.

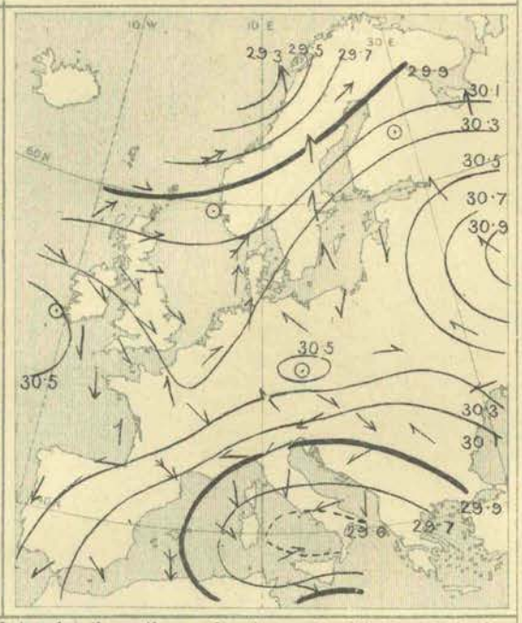
Temperature and Weather. — 8 a.m.



Barometer and Wind. — 8 a.m.



Barometer and Wind. — 6 p.m.



Weather in morning fine and bright at some isolated stations over Portugal, the south and south-east of France, western Germany, and some of the shores of the Baltic, cloudy or overcast elsewhere; rainy at Stornoway and over the south-east of England, as well as at some Algerian stations, snow in many localities. Considerable rain over the Netherlands, the south-east of England, and north of France later, as well as at Stornoway, slight falls in the north of Ireland, and snow showers locally in many parts of Europe. Sky clearing over England at night.

Temperature rising over the British Islands and Europe generally. Morning readings, 46° to 49° at the Irish stations and Scilly, 45° to 48° in Scotland, and above 40° on the Atlantic coasts of Europe. Much lower over the inland countries, and lowest of all, – 18° Fahr. at Riga and Swinemunde, – 15° at Fahr. at Ulleaborg, – 12° at Moscow, – 5° at Kharkov, – 4° at Berlin; – 10° at Belfort, 0° zero at Lyons, + 10° at Paris. Rising later to 50° in several parts of Ireland and Scotland, to 45° at most of the English and western French stations, 52° at Brest, and 57° at Lisbon. Frost on the ground over England at night—severe frost continuing over central and eastern Europe.

Wind strong from the North-Westward on the northern and western coasts of the British Islands and Brittany; light Westerly over the south-east of England. Southerly over the Netherlands and Denmark; very light and anticyclonic over Russia and the central parts of Germany and France; Northerly and North-Easterly on the northern shores of the Adriatic and Mediterranean, Northerly to North-Westerly over Algeria and Tunis, Westerly at Malta. Becoming North-Westerly all over England later.

Barometer highest, (1) 30·8 ins. and more to 30·3 ins. over Russia; (2) 30·4 ins. and more to 30·3 ins. over the north-west of Spain, the south-west of England, and the greater part of Ireland, and still higher over the adjacent parts of the Atlantic. Lowest, 29·4 ins. and less in a large depression off the north-west of Norway, and 29·5 ins. and less in another over Sicily and the south of Italy. Rising over the United Kingdom during the day, and the rise spreading eastwards.

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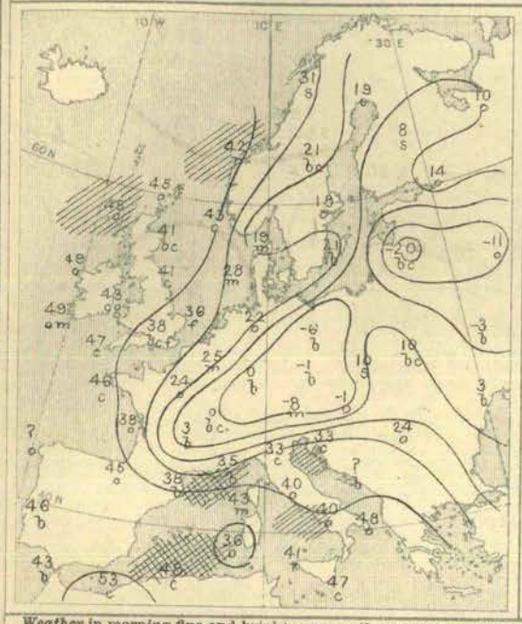
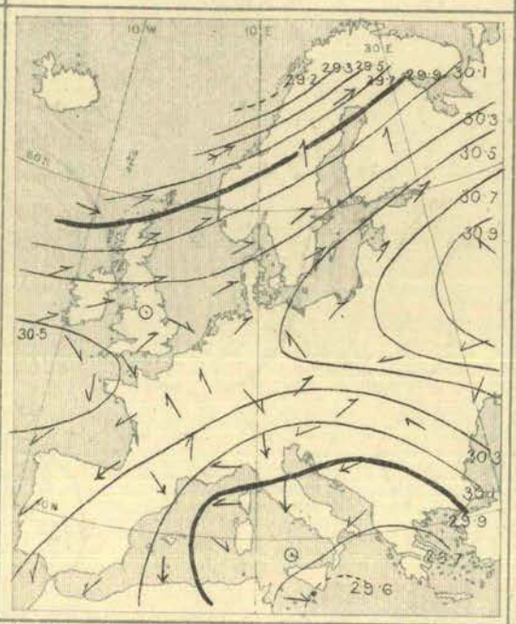
Thursday, 19th January.

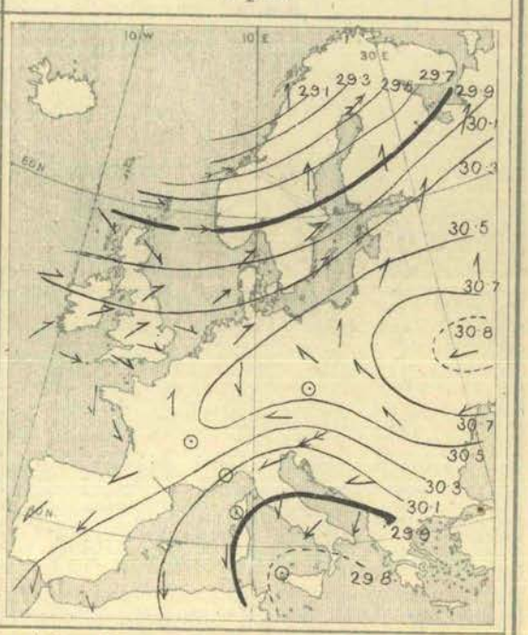
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over south-eastern, southern, and south-western Europe, fair over the north-eastern parts of Great Britain and in Sweden, foggy over the south-east of England; cloudy or overcast elsewhere, with snow in Finland and Austria, rain at Palermo. Some rain or sleet over the greater part of our Islands, the North Sea, and the north and west of France during day, but amounts small; considerable snow in the north-west and north of Scandinavia, heavy rain at Palermo.

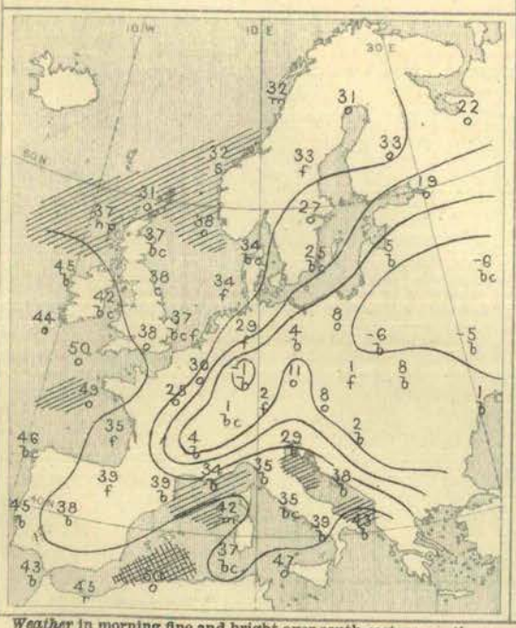
Temperature risen rapidly over northern Europe, quickly over France, fallen fast over south Germany, Austria, and the south of Russia. Morning readings exceeding 50° at Oran and Nemours only, but as high as 43° to 49° at nearly all stations in the west of our Islands, and on the Atlantic coasts of Europe; lowest, (1) – 20° at Riga, – 12° at Kharkov, – 11° at Moscow, – 2° at Kiev; (2) – 8° at Munich, – 6° at Berlin, 0° zero at Wiesbaden, 24° at Paris. Rising later to 45° or more over the greater part of our Islands, to 51° on our south-west coast, to 52° at Brest, and 55° at Lisbon and Palermo, and to between 55° and 60° at San Fernando and in Algeria.

Wind Westerly over the greater part of our Islands, and blowing freshly at the north-western stations; South-Westerly over Scandinavia, Southerly in Lapland and Finland; light and variable over Russia and central Europe; North-Easterly to Northerly over the southern coasts generally, but Westerly at Malta. Veering to North-West in Scotland later.

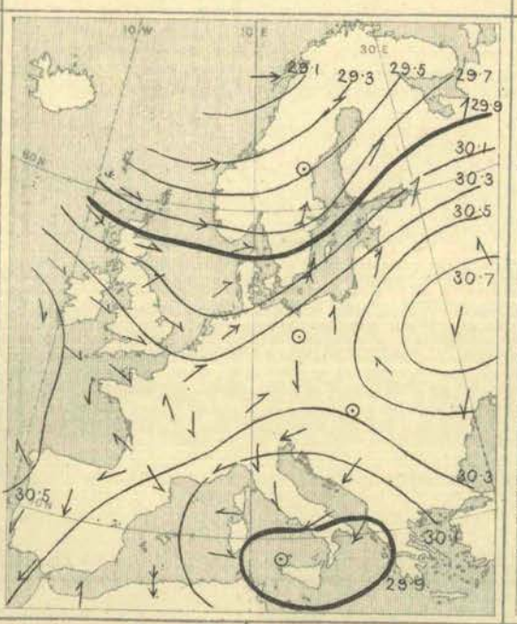
Barometer highest, 30·9 ins. and more to 30·5 ins. over central Russia, Poland, and Germany; rather above 30·5 ins. over Brittany, the south-west of England, and adjacent parts of the Atlantic. Lowest, 29·2 ins. to 29·5 ins. over Lapland and the northern parts of Norway; 29·6 ins. to 29·8 ins. over the south-eastern part of the Mediterranean and the south of Italy. Gradients steep both in the extreme north and extreme south of Europe, slight elsewhere. Falling rather decidedly over Scandinavia and over Russia later.

Friday, 20th January.

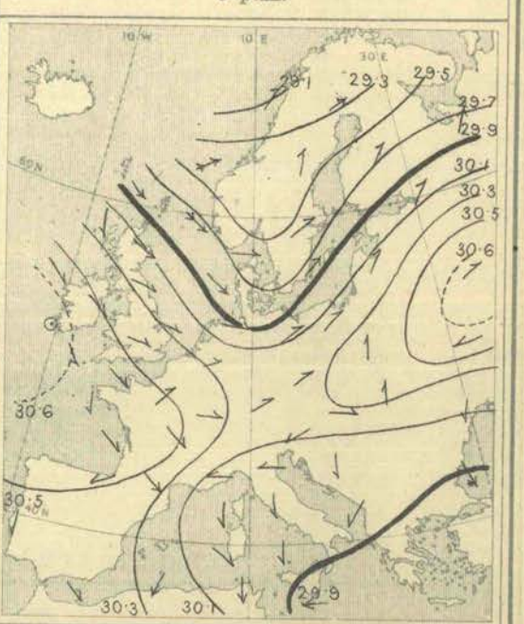
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over south-eastern, southern, and south-western Europe, fair as a whole, but dull over the greater part of France, England, and Ireland, but hazy in places; dull and unsettled over the more northern countries, with rain, sleet, or hail in several places. Snow falling at Hangö, Copenhagen, and Breslau. Sleet and rain over the north-western and northern parts of the United Kingdom later, as well as in the Netherlands and Germany; small quantities of rain in the south-west of France, but a larger quantity over Algeria.

Temperature risen somewhat over the Channel, France, and south Germany, and risen very rapidly again over Finland and the north-west of Russia. Morning readings ranging between 40° and 50° over Algeria, and on the Atlantic coasts of Europe and the British Isles; exceeding 35° over nearly the whole of our Islands, and exceeding 32° in many parts of northern Europe; much lower elsewhere. Lowest, – 1° to – 9° over central and southern Russia and in Poland, – 1° at Wiesbaden, + 1° at Cracow and Belfort, 3° at Breslau, 4° at Berlin and Lyons, 23° at Paris. Rising later to 40° and more at nearly all our stations, to 45° and more in Ireland, to 50° at Nice, to 55° at Palermo, and to 57° at Oran. Still cold over central Europe.

Wind (1) Westerly, strong to a gale over Norway and Scotland, North-Westerly, moderate in Ireland, Westerly, light over the eastern half of England, South-Westerly on the eastern shores of the North Sea, Southerly (a gale) over the Baltic; (2) North-Easterly over south-eastern Europe, Northerly over Italy (a gale in places), North-Westerly over Tunis; (3) very light and variable over Russia, central Europe, and France. Veering North-Westward in Scotland and at Skudesnaes later, and blowing very hard from West-South-West at Christiansund, and a Southerly gale over Finland. Northerly wind over Italy subsiding.

Barometer highest, 30·8 ins. and more to 30·5 ins. over Russia, Poland, and Hungary, and 30·5 ins. and more over the south-west of Ireland, and all adjacent parts of the Atlantic; exceeding 30·4 ins. in a "col" uniting these two high-pressure areas, and lying across France and Germany. Lowest, 29·0 ins. to 29·3 ins. over Finmark and the north of Norway, and 29·9 ins. and less to 30·0 ins. in a large shallow depression over Sicily and the southern half of Italy. Northern depression moving south-eastwards later, and barometer rising slowly in Scotland and Ireland and Lapland, falling decidedly over Russia.

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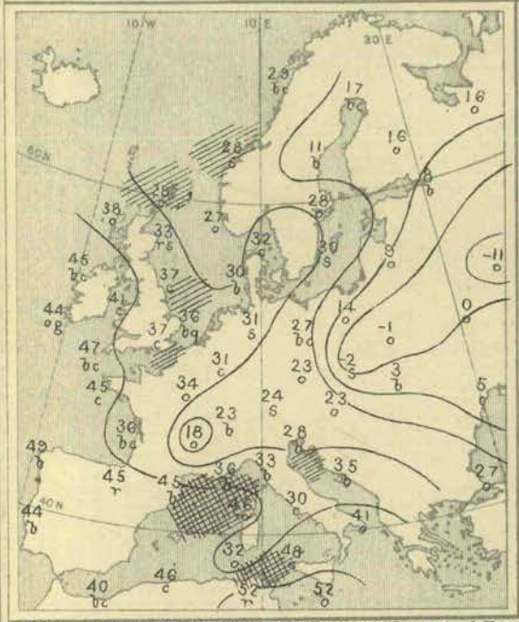
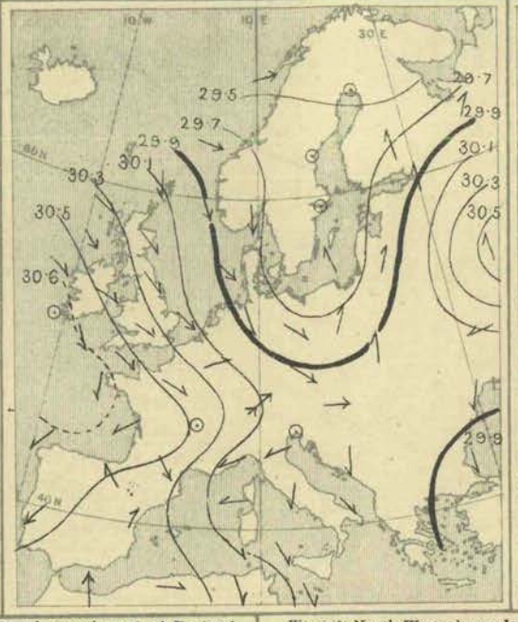
III.—SUMMARY OF WEATHER OVER EUROPE.

Saturday, 21st January.

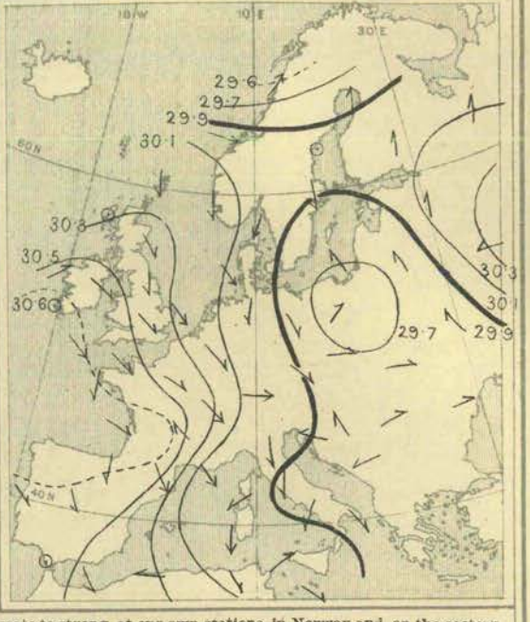
Temperature and Weather. — 8 a.m.



Barometer and Wind. — 8 a.m.



Barometer and Wind. — 6 p.m.



Weather in morning fine over Algeria, Portugal, the west of France, the south-west of England, as well as in Denmark, Sweden, and at St. Petersburg; cloudy, changeable, and unsettled elsewhere, with rain showers at some of our western stations, and at Tunis, snow at Christiansund, Helsingfors, Breslau, and Cracow. Showers of rain during day over the greater part of our Islands and many parts of France, snow over Austria, Germany, and some parts of northern Europe.

Temperature fallen again over northern, risen rapidly over central, Europe. Morning readings above 50° at Malta and La Calle only, exceeding 40° on the Atlantic coasts of Spain, France, and the British Isles; and exceeding 32° over the British Isles and the western half of France. Lowest, − 11° Fahr. to − 4° Fahr. over central Russia, rather below zero over Poland, + 11° to 17° over Finland and the northern half of Sweden, 22° to 30° over Austria and Germany, 18° at Lyons. Exceeding 45° in many parts of our Islands and the north and west of France later, touching 50° at Donaghadee and Valencia (Ireland), 52° at Brest, and 52° to 55° in the western parts of the Peninsula and the south of Italy, and 57° on the Algerian coast.

Wind (1) North-Westerly, moderate to strong, at our own stations, in Norway and on the eastern shores of the North Sea, Westerly to Southerly and moderate over Germany, Southerly over the Baltic (a gale at Hangö); (2) mainly Northerly and North-Westerly over the Mediterranean, very variable and light over Russia. Falling light on our north-western coasts later, and backing to the Westward.

Barometer highest, (1) 30·6 ins. and more to 30·2 ins. in the eastern portion of an anticyclone spreading in from the Atlantic over Spain, France, and the United Kingdom; (2) 30·5 ins. and more to 30·0 ins. in another over Russia. Lowest, 29·5 ins. and less over Lapland, and below 29·6 ins. in a secondary system stretching southwards over Sweden; 29·9 ins. and less over the Black Sea and Asia Minor. Continental anticyclone giving way later, that in the west spreading eastwards, but showing some signs of giving way also.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force is indicated thus: ⟫⟶ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze: ⟶ = a light to moderate breeze: and ⊙ = a calm. In the left-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Germany, Sweden, and Norway, and 7 a.m. in France, Algeria, Italy, Austria, and Russia; that for 6 p.m. is prepared from observations made at 6 p.m. in the British Islands and France, 7 p.m. in Algeria, 8 p.m. in Sweden and Norway, Germany, and Austria, and 9 p.m. in Russia, Belgium, and Italy. The time indicated in each case is the standard time for each country.

GENERAL NOTES.

Throughout this week there have been two large high-pressure systems observed—one over Russia, the other over the Atlantic. These have been united by a "col" lying from west to east—sometimes across our Islands, the North Sea, and the Baltic, but at others across the northern parts of France and Germany. Depressions have, meanwhile, appeared both off our northern coasts and the Mediterranean, keeping the weather in those regions and over south-eastern Europe in an unsettled condition, while over Ireland, England, and north Germany it has been comparatively fair. A great deal of cloud has prevailed in most places, but over the south-western and western parts of the British Islands, and in the north-east of England, the amount of Bright Sunshine has been in excess of the mean for the time of year.

At the close of the week the continental anticyclone was giving way, while that over the Atlantic was beginning to move south-eastwards, and temperature over western Europe showed a tendency to increase.

BRIGHT SUNSHINE Values for the Week in addition to those found on page 14.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	7·0	?	13	?	EASTBOURNE	0·8	?	1	?
OSWALDKIRK (Yorkshire)	7·1	?	13	?	TENBY	19·2*	?	34*	?
WORKSOP	5·4	− 3·0	10	− 4	NEWQUAY	14·0	?	23	?
THURCASTON (Leicestershire)	8·7	+ 1·4	16	+ 3	TORQUAY	19·2*	?	32*	?
MARGATE	2·6	?	4	?	ARLEY COTTAGE (County Cavan)	8·0	?	15	?
WESTBOURNE (Sussex)	5·7*	?	10*	?	GUERNSEY	8·3*	?	14*	?
BRIGHTON	3·0	?	5	?					

The values at Westbourne, Tenby, Torquay and Guernsey are obtained by Jordan's Photographic Recorder.

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WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; R. H. SCOTT, F.R.S., SECRETARY.

By whom Subscriptions, payable in advance, can be received.

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VOL. X. No. 4.] *Third Series.* WEEK ENDING SATURDAY, 28TH JANUARY, 1893. [*Price 6d.* [*Annual subscription, post paid, £1 10s. 0d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871–90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty-five years 1866–90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90, only. BRIGHT SUNSHINE.—*The Mean values* employed are those for the corresponding periods in the ten years 1881–90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

DISTRICTS. (See p. 20.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 1st, 1893. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
	°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts. 0. SCOTLAND, NORTH	52	25	45·5	36·8	41·3	3 above.	10	+ 3	22	−11	14	− 16	206	+ 74
1. SCOTLAND, EAST	53	32	45·8	37·0	41·9	4 above.	11	+ 3	24	− 16	16*	− 17	214*	+ 54
2. ENGLAND, N.E.	53	32	46·2	36·9	41·6	3 above.	12	+ 4	21	− 15	13	− 13	194	+ 43
3. ENGLAND, EAST	50	28	45·7	34·6	40·3	2 above.	10	+ 2	30	−12	10	− 18	257	+ 82
4. MIDLAND COUNTIES	53	26	47·2	35·5	41·6	3 above.	15	+ 6	28	−15	15	− 21	243	+ 68
5. ENGLAND, SOUTH	53	27	45·8	36·4	41·3	2 above.	11	0	24	− 7	11	− 30	227	+ 94
Principal Grazing, &c., Districts. 6. SCOTLAND, WEST	53	34	47·3	40·2	43·9	4 above.	21	+12	5	−23	31	− 9	162	+ 43
7. ENGLAND, N.W.	51	31	46·2	39·2	42·8	3 above.	17	+ 9	8	−22	21	− 13	162	+ 38
8. ENGLAND, S.W.	51	24	47·7	38·2	43·1	2 above.	24	+ 9	11	−11	32	− 28	152	+ 61
9. IRELAND, NORTH	52	32	47·3	40·2	43·9	3 above.	21	+ 7	5	−20	41	− 14	116	+ 13
10. IRELAND, SOUTH	53	29	49·5	39·0	44·5	2 above.	30	+10	8	−11	57	− 24	96	+ 16
— CHANNEL ISLANDS	51	35	49·6	42·4	46·1	2 above.	29	+ 8	0	− 9	60	− 24	68	+ 27

Rainfall.

DISTRICTS. (See p. 20.)	For the Week. Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 1st, 1893. Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.
		10ths of In.	10ths of In.			Ins.	Ins.
Principal Wheat-producing Districts. 0. SCOTLAND, NORTH	7	18	5 more.	22	+ 2	4·2	− 0·9
1. SCOTLAND, EAST	5	5	2 less.	20	+ 6	1·9	− 0·7
2. ENGLAND, N.E.	2	1	3 less.	16	+ 3	1·2	− 0·5
3. ENGLAND, EAST	5	5	1 more.	20	+ 6	1·7	− 0·1
4. MIDLAND COUNTIES	4	6	1 more.	16	+ 2	1·4	− 0·8
5. ENGLAND, SOUTH	4	3	3 less.	16	+ 2	1·7	− 0·8
Principal Grazing, &c., Districts. 6. SCOTLAND, WEST	6	10	3 less.	17	− 1	1·8	− 3·6
7. ENGLAND, N.W.	5	4	3 less.	16	+ 1	1·1	− 1·8
8. ENGLAND, S.W.	6	10	1 more.	16	− 1	2·3	− 1·5
9. IRELAND, NORTH	6	7	1 less.	20	+ 2	2·3	− 0·9
10. IRELAND, SOUTH	5	9	0 (average)	16	− 1	3·1	− 0·7
— CHANNEL ISLANDS	6	5	2 less.	19	+ 1	2·6	− 0·6

Bright Sunshine.

DISTRICTS. (See p. 20.)	For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 1st, 1893. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
Principal Wheat-producing Districts. 0. SCOTLAND, NORTH	5	+ 2	9	+ 4	27	+ 5	14	+ 3
1. SCOTLAND, EAST	9	+ 1	18	+ 1	26	−19	13	− 9
2. ENGLAND, N.E.	7	− 3	11	− 5	30*	− 1	14	0
3. ENGLAND, EAST	14	+ 3	24	+ 5	36	− 8	16	− 4
4. MIDLAND COUNTIES	10	− 1	17	− 2	37	0	17	0
5. ENGLAND, SOUTH	9	− 3	15	− 4	30	− 8	13	− 4
Principal Grazing, &c., Districts. 6. SCOTLAND, WEST	6	− 4	10	− 5	40	+10	19	+ 5
7. ENGLAND, N.W.	6	− 3	11	− 4	28*	− 5	13	− 2
8. ENGLAND, S.W.	13	− 1	20	− 1	54	+11	23	+ 4
9. IRELAND, NORTH	6	− 6	10	− 9	30	+ 8	14	− 4
10. IRELAND, SOUTH	9	− 5	16	− 6	34	−15	15	− 7
— CHANNEL ISLANDS	15	− 2	24	− 3	41	−22	17	− 9

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather during this period was mild and humid, with generally clouded skies and occasional rain.

Temperature exceeded the mean in all districts, the excess varying from 2° to 3° in most parts of the Kingdom, to 4° in Scotland E. and W. The highest of the maxima were registered on the 23rd, and ranged from 53° in several of the English and Scotch districts and in Ireland S. to 50° in England E. The lowest of the minima were recorded, as a rule, towards the end of the week, when the thermometer fell to 24° in England S.W., 25° in Scotland N., and to between 26° and 32° in most other districts; in Scotland W., however, the lowest reading was 34°, and in the Channel Islands 35°.

Rainfall was rather more than the mean in Scotland N., England E., the Midland Counties, and England S.W., and just equal to it in Ireland S.; in all other districts there was a deficit. In England N.E. the fall was very slight.

Bright Sunshine exceeded the mean at some of the stations in Scotland N. and E., as well as in England E.; elsewhere there was a deficiency. The percentage of the possible duration ranged from 24 in England E. and the Channel Islands, and 20 in England S.W., to 9 in Scotland N.

Barometer and Wind.—During the earlier part of the week the barometer was highest in the south-west, and lowest in the north and north-east, the winds being moderate from the Westward and North-Westward. No depressions came directly over us until the 26th, when a rather deep "V" shaped system advanced eastwards across the United Kingdom, its passage being attended by fresh or strong South-Westerly to North-Westerly winds. As this disturbance disappeared, moderate to somewhat steep gradients for Southerly winds were established over our Islands, and depressions, moving in a northerly direction, began to skirt our western coasts.

* This value has been altered owing to the receipt of further information.

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II.—DATA from which the SUMMARY on page 19 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°				Inches	Inches.				
0. SCOTLAND, N.	Sumburgh Head ℌ	48	25	44·3	35·0	39·8	+ 0·4	6	27	7	1·66	+0·83	*	*	*	*
	Stornoway	50	30	47·1	36·9	42·2	+ 3·0	23	14	7	0·86	−0·30	10·1	+ 2·6	19	+ 4
	Wick	50	32	45·3	36·1	40·9	+ 2·7	9	24	6	0·82	+0·36	*	*	*	*
	Lairg ℌ	49	30	44·0	34·4	39·4	+ 3·0	6	29	6	1·31	+0·53	*	*	*	*
	Glencarron ℌ	49	30	44·7	37·2	41·1	+ 3·5	8	29	7	3·35	+1·15	*	*	*	*
	Fort Augustus ℌ	50	31	46·1	37·4	41·9	+ 2·9	11	20	7	1·48	+0·46	0·8	?	1	?
	Fort William ℌ	52	36	47·1	40·3	43·8	+ 4·4	20	5	7	2·93	+0·71	3·0	?	6	?
1. SCOTLAND, E.	Nairn	51	32	46·3	37·0	41·8	+ 3·9	12	22	5	0·41	0·00	*	*	*	*
	Aberdeen	53	33	46·6	37·4	42·2	+ 4·1	21	13	5	0·32	−0·19	14·3	+ 1·1	26	+ 1
	Braemar ℌ	47	?	42·2	?	?	?	?	?	5	0·59	−0·13	7·0†	?†	13†	?†
	Ochtertyre ℌ	52	32	46·1	35·6	41·1	+ 4·1	11	27	5	1·40	+0·25	*	*	*	*
	Leith	52	33	48·6	39·0	44·0	+ 4·7	27	8	2	0·02	−0·40	*	*	*	*
	Marchmont ℌ	49	32	45·0	35·9	40·6	+ 3·6	8	25	3	0·17	−0·43	6·3	?	11	?
2. ENGLAND, N.E.	Alnwick Castle	?	33	?	38·1	?	?	?	?	2	0·17	−0·31	*	*	*	*
	Durham	51	32	46·1	36·4	41·4	+ 4·0	11	24	2	0·04	−0·33	9·8	− 1·1	17	− 2
	Shields	52	33	47·7	38·4	43·2	+ 4·1	24	10	1	0·02	−0·38	*	*	*	*
	Scarborough ℌ	53	33	45·9	36·6	41·4	+ 2·4	11	23	3	0·16	−0·29	*	*	*	*
	York	53	33	47·9	36·6	42·5	+ 4·3	26	15	3	0·06	−0·38	2·9	− 4·9	5	− 8
	Spurn Head	47	33	43·3	35·4	39·5	+ 1·1	4	25	2	0·24	−0·07	*	*	*	*
3. ENGLAND, E.	Hillington ℌ	48	28	45·7	34·2	40·2	+ 2·5	10	32	5	0·37	−0·05	12·4	+ 1·2	21	+ 3
	Yarmouth	47	31	43·6	34·1	39·0	+ 0·9	4	30	5	0·69	+0·25	*	*	*	*
	Geldeston	50	30	45·4	34·8	40·3	+ 1·4	10	29	6	0·64	+0·27	16·4	+ 3·4	27	+ 5
	Cambridge	50	30	47·9	34·4	41·4	+ 3·2	17	32	4	0·44	+0·06	17·0	+ 4·9	28	+ 8
	Rothamsted	48	30	45·8	35·4	40·8	+ 3·1	11	27	7	0·52	−0·08	11·1	?	19	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	52	30	47·4	33·9	40·9	+ 2·7	15	34	3	0·19	−0·21	*	*	*	*
	Loughborough	51	29	48·3	36·1	42·4	+ 4·1	28	17	4	0·59	+0·11	*	*	*	*
	Stamford (Ketton Hall)	50	28	47·9	34·6	41·5	+ 3·3	17	32	4	0·38	0·00	*	*	*	*
	Cheadle ℌ	49	31	45·3	36·0	40·8	+ 3·7	9	24	5	0·65	+0·07	*	*	*	*
	Churchstoke ℌ	50	29	46·8	36·3	41·8	+ 3·4	13	25	4	0·98	+0·33	13·5	+ 2·3	23	+ 4
	Hereford ℌ	51	30	47·8	36·0	42·1	+ 2·9	26	17	3	0·64	+0·07	*	*	*	*
	Cirencester	51	26	46·7	34·6	40·9	+ 2·7	13	31	3	0·66	−0·04	10·1	− 1·7	17	− 3
	Oxford	53	31	47·4	36·4	42·1	+ 2·9	24	16	3	0·55	+0·04	9·3	− 1·0	16	− 1
5. ENGLAND, S.	London	50	31	45·9	37·1	41·7	+ 2·1	11	21	3	0·28	−0·20	3·3†	− 3·7†	6†	− 4†
	North Foreland	48	32	43·6	35·7	39·8	+ 0·2	4	24	5	0·34	?	*	*	*	*
	Strathfield Turgiss ℌ	52	29	46·2	34·4	40·5	+ 1·9	12	31	5	0·22	−0·28	*	*	*	*
	Dungeness	49	34	44·1	36·4	40·4	+ 0·4	6	22	5	0·25	−0·33	*	*	*	*
	Hastings (St. Leonards)	50	35	46·5	38·1	42·5	+ 2·3	20	11	5	0·31	−0·29	11·3	− 2·9	19	− 4
	Southampton	53	27	47·5	36·6	42·3	+ 2·1	25	15	3	0·24	−0·48	8·6	− 3·1	14	− 5
	Hurst Castle	48	32	46·3	36·4	41·6	+ 0·7	12	24	3	0·09	−0·59	*	*	*	*
	Stowell ℌ	48	29	46·5	36·5	41·7	+ 2·8	13	24	6	0·68	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	52	34	48·3	39·6	44·1	+ 3·9	25	7	7	2·36	+0·38	*	*	*	*
	Glasgow	50	35	46·9	40·5	43·8	+ 4·9	19	4	5	0·55	−0·39	4·8	− 1·9	9	− 2
	Ardrossan	50	37	46·6	40·7	43·8	+ 3·3	18	4	7	0·44	−0·51	*	*	*	*
	Glenlee ℌ	53	34	47·3	39·6	43·6	+ 6·0	21	7	7	1·26	−0·44	*	*	*	*
	Douglas (Isle of Man)	50	36	47·6	40·7	44·3	+ 3·7	22	4	5	0·54	−0·48	6·6	− 4·1	11	− 8
7. ENGLAND, N.W.	Newton Reigny	48	34	44·1	38·1	41·2	+ 2·8	6	16	6	0·60	−0·28	2·7	− 6·4	5	−10
	Stonyhurst	48	34	45·2	38·5	42·0	+ 3·5	9	10	5	0·27	−0·41	11·4	+ 2·5	20	+ 5
	Blackpool ℌ	49	31	45·2	38·0	41·7	+ 3·4	9	17	7	0·42	−0·25	2·4†	?†	4†	?†
	Manchester	51	35	47·4	38·9	43·3	+ 3·2	22	9	4	0·31	−0·14	*	*	*	*
	Liverpool Obsy. (Bidston)	49	37	47·4	40·3	44·0	+ 2·3	21	5	4	0·29	−0·31	8·2	− 1·8	14	− 4
	Llandudno ℌ	50	39	47·7	41·3	44·6	+ 2·5	21	2	4	0·35	−0·36	*	*	*	*
	Holyhead															
8. ENGLAND, S.W.	Llandovery	50	24	47·0	33·4	40·5	− 0·6	14	36	7	1·05	−0·11	*	*	*	*
	Pembroke	49	39	47·3	42·3	44·9	+ 2·4	20	0	7	1·35	+0·55	8·1	− 4·6	14	− 8
	Arlington (N. Devon)	48	28	45·7	35·6	40·9	+ 1·2	10	27	6	1·37	+0·38	*	*	*	*
	Cullompton ℌ	50	28	48·3	36·0	42·4	+ 2·2	28	17	6	1·01	+0·27	10·4	+ 0·4	17	+ 1
	Falmouth	51	35	49·0	41·8	45·5	+ 1·6	25	1	5	0·82	−0·38	17·6	+ 5·4	28	+ 8
	Plymouth	50	31	48·3	40·3	44·5	+ 2·3	25	5	7	0·91	+0·03	10·5	− 1·0	17	− 2
	Prawle Point	51	34	48·0	38·3	43·3	+ 1·2	25	10	7	0·60	−0·09	*	*	*	*
9. IRELAND, N.	Malin Head	48	38	45·4	41·4	43·5	+ 2·4	13	2	7	0·36	?	*	*	*	*
	Londonderry	52	37	48·0	40·3	44·3	+ 3·9	23	5	6	0·49	−0·40	*	*	*	*
	Edenfel (Omagh)	50	33	46·7	39·0	43·0	+ 3·7	20	8	6	0·61	−0·15	*	*	*	*
	Mullaghmore	50	39	48·0	42·0	45·1	+ 2·9	22	0	7	0·35	−0·56	*	*	*	*
	Belmullet	50	39	47·9	43·3	45·7	+ 2·8	26	0	7	1·02	?	*	*	*	*
	Markree Castle	51	32	47·4	37·8	42·8	+ 2·6	23	12	7	0·48	−0·27	7·6	− 3·7	13	− 5
	Brookeborough	50	35	47·3	39·7	43·7	+ 4·7	22	6	5	0·87	−0·08	*	*	*	*
	Armagh	51	35	47·4	39·0	43·4	+ 4·2	22	8	7	0·49	−0·13	4·3	− 6·9	7	−11
	Donaghadee	52	34	47·7	39·3	43·7	+ 3·1	23	8	4	1·21	+0·56	*	*	*	*
	Edgeworthstown	?	33	?	35·4	?	?	?	?	6	0·81	+0·13	*	*	*	*
10. IRELAND, S.	Dublin	53	37	50·2	40·9	45·7	+ 3·6	31	3	5	0·39	−0·11	9·3	− 3·7	16	− 7
	Parsonstown	52	33	48·6	37·4	43·2	+ 2·8	28	13	6	0·73	+0·06	7·1	− 5·3	12	− 9
	Kilkenny	52	29	48·7	36·6	42·9	+ 1·4	29	15	4	0·77	0·00	*	*	*	*
	Waterford	53	31	49·4	37·7	44·8	+ 0·8	31	12	5	0·74	−0·30	*	*	*	*
	Roche's Point	52	35	49·4	39·0	44·4	+ 0·6	29	8	3	1·05	−0·17	*	*	*	*
	Valencia	52	39	50·6	42·1	46·5	+ 1·4	32	0	6	1·51	+0·05	11·3	−3·2	19	− 4
	Killarney	51	34	49·9	36·7	43·6	− 0·4	33	15	6	1·66	?	*	*	*	*
	Foynes	? 52	37	? 49·2	41·6	? 45·6	? + 2·8	? 27	1	6	0·58	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	51	40	49·2	43·7	46·9	+ 1·9	34	0	7	0·60	−0·20	*	*	*	*
	Jersey	51	35	49·3	41·0	45·3	+ 2·9	27	3	5	0·42	−0·28	15·9	− 1·5	24	− 3

Stations marked ℌ are in connection with the Royal Meteorological Society, and those marked ☩ with the Scottish Meteorological Society.

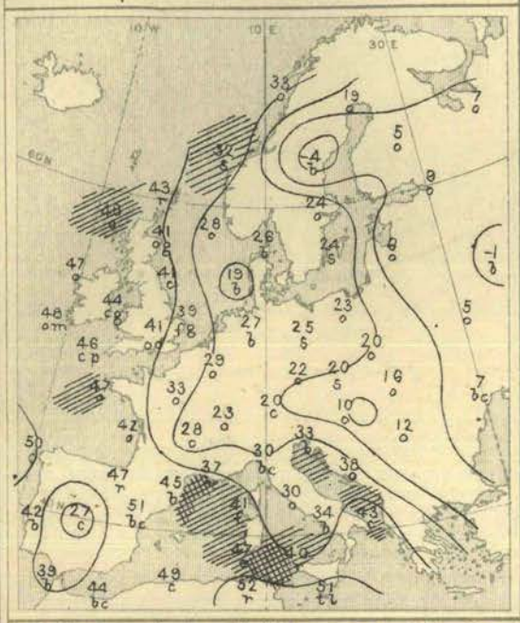
* An asterisk is inserted in all places for which the information is not usually received.

† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

III.—SUMMARY OF WEATHER OVER EUROPE.

Sunday, 22nd January.

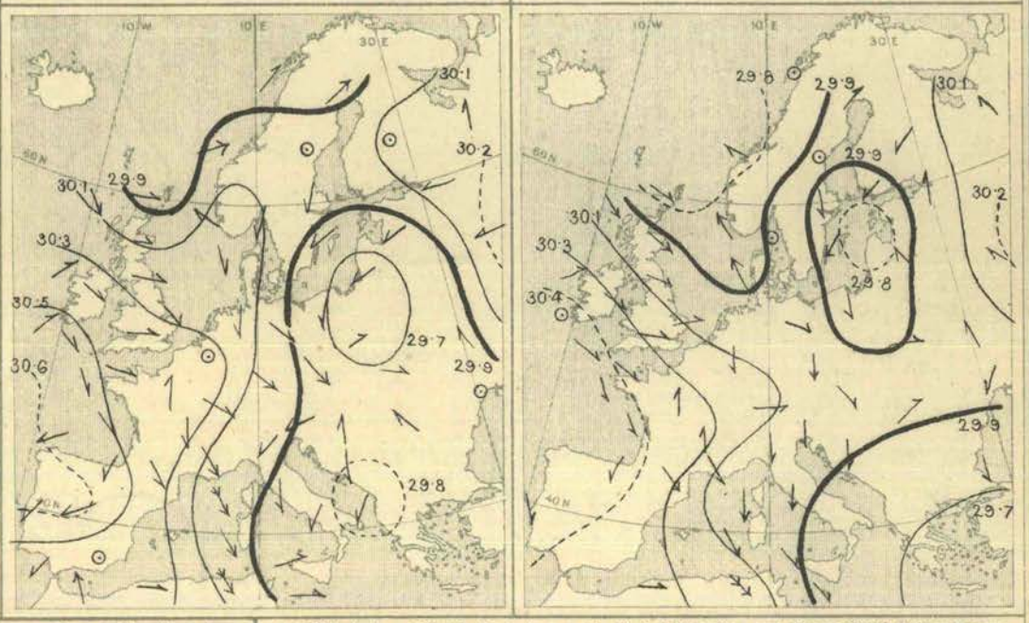
Temperature and Weather. 8 a.m.



Weather in morning fine and bright over many parts of south-western, southern, and south-eastern Europe, as well as over western Germany, Denmark, and some parts of Sweden and central Russia—very dull elsewhere—changeable and hazy over the United Kingdom, with some rain in several places. A little sleet or rain at several of our own and the French stations later—most at Stornoway—and considerable quantities in the Netherlands. Snow falling in several parts of Poland and Austria.

Temperature fallen over the northern, risen over the southern half of Russia. Morning readings exceeding 50° at Palermo, La Calle, and Barcelona only, but ranging between 50° and 40° on the southern side of the Mediterranean, and all the Atlantic coasts of Europe and the British Islands. Considerably lower on the Continent; lowest of all, − 4° at Hernösand, − 1° Fahr. at Moscow, + 5° at Kuopio, 7° both at Archangel and Kiev, 10° at Buda-Pesth, 18° at Münster. Rising to 50° or more in the western parts of France, Ireland, and east of Scotland, and to between 45° and 47° over England. Night rather cold over our north-eastern counties and in Belgium.

Barometer and Wind. 8 a.m. and 6 p.m.

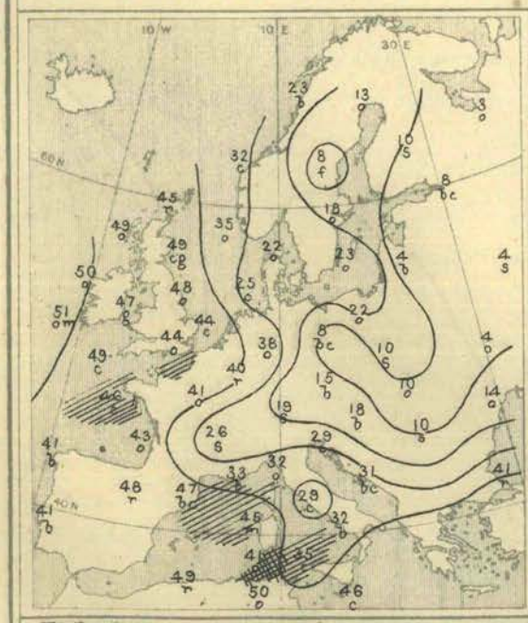


Wind Westerly and North-Westerly over the United Kingdom and France, North-Easterly over Spain and Portugal; Easterly over Russia, North-Easterly over the Baltic, North-Westerly over Germany, Westerly over Austria-Hungary; strong to a gale from North and North-West over Sardinia and the eastern half of the Mediterranean. Freshening from North-West in Scotland later, but from South-East in Norway. Gale in Mediterranean subsiding towards evening.

Barometer highest, (1) 30·6 ins. and more to 30·2 ins. over Spain, France, England, and Ireland, with the adjacent parts of the Atlantic; (2) 30·2 ins. and more over the eastern half of Russia. Lowest, 29·8 ins. and less in a depression over the southern parts of the Adriatic; 29·7 ins. and less in another over eastern Prussia and the Baltic Provinces; 29·9 ins. and less over Lapland and the Shetland Isles. Falling steadily over the British Isles and north-western Europe later. Depression over Adriatic passing away to the south-eastward; shallow disturbance over eastern Prussia moving slowly northwards.

Monday, 23rd January.

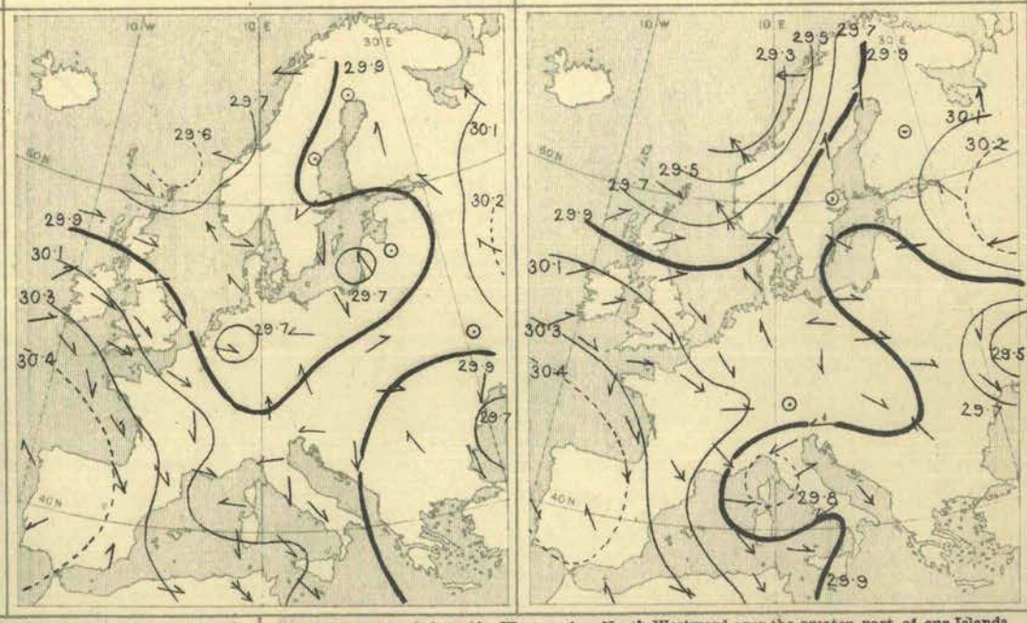
Temperature and Weather. 8 a.m.



Weather cloudy or overcast in most parts of our Islands and the Continent, with fog at some of the Scandinavian stations, rain in the Shetlands, and also in the Netherlands, and snow in several parts of Russia, Germany, and central France. Fine and bright in Spain, the south of Italy, the extreme south of France, and some parts of eastern Germany. Slight rain falling later over the northern and southern parts of the United Kingdom generally, and large quantities of snow in Germany.

Temperature risen in most parts of western Europe and also in the south of Russia, but fallen elsewhere. Morning readings highest, (1) 51° at Valencia Island, and 50° at Leith, Belmullet, and Donaghadee; (2) 50° at La Calle and 49° at Algiers. Lowest, 3° at Archangel, 40° at Moscow, Riga, and Kiev, and 8° at Uleaborg; below 20° in nearly all parts of northern, eastern, and central Europe, and below the freezing point in Italy. Rising during day to between 50° and 53° in most parts of the United Kingdom, and also in the west and south of France; remaining below the freezing point in Germany, and below 40° over the greater part of Italy.

Barometer and Wind. 8 a.m. and 6 p.m.



Wind light to fresh from the Westward or North-Westward over the greater part of our Islands and France, but South-Westerly in the north of Ireland. South-Easterly on the eastern shores of the North Sea, but calm over the northern parts of Sweden. Cyclonic circulations of light breezes reported respectively over the Baltic and neighbouring provinces, and over the Netherlands and western Germany. Northerly or North-Westerly over the south of Russia and also over Italy and Tunis. Subsequently backing to the South-West in the western and northern parts of our Islands generally. Increasing to a gale from the South-Eastward in the west of Norway.

Barometer highest, 30·4 ins. and upwards in an an anticyclone lying over Spain and the Bay of Biscay, 30·2 ins. and upwards in another area lying over central Russia. Lowest, 29·6 ins. and less in a depression off the west of Norway, 29·7 ins. and less in two other systems lying respectively over the Baltic Provinces and over north Germany. German depression filling up later, but well-marked disturbances appearing off the west of Norway and over the south of Russia.

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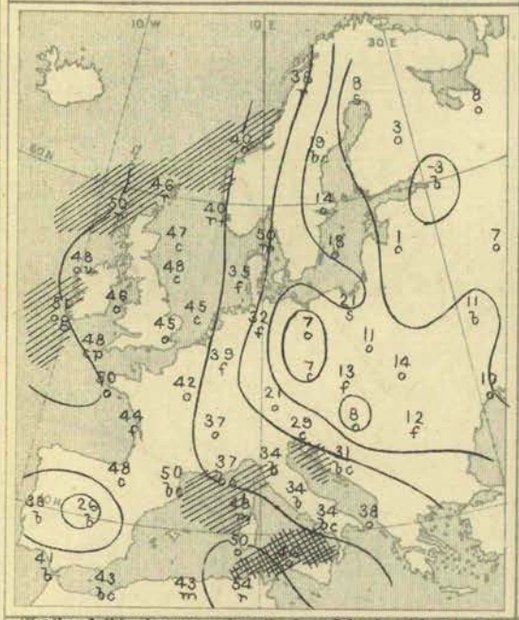
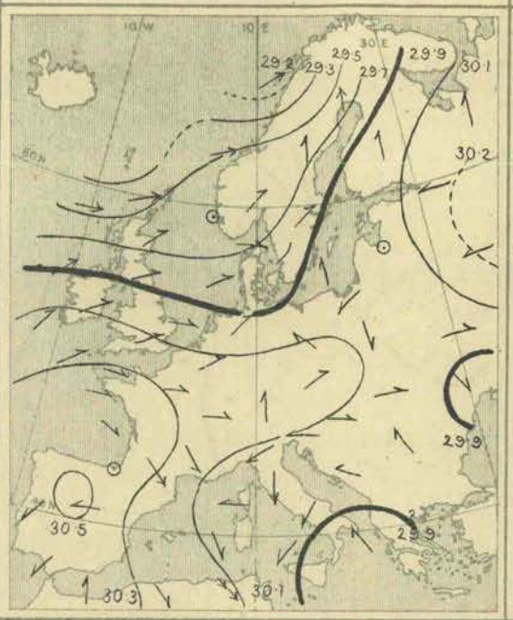
III.—SUMMARY OF WEATHER OVER EUROPE.

Tuesday, 24th January.

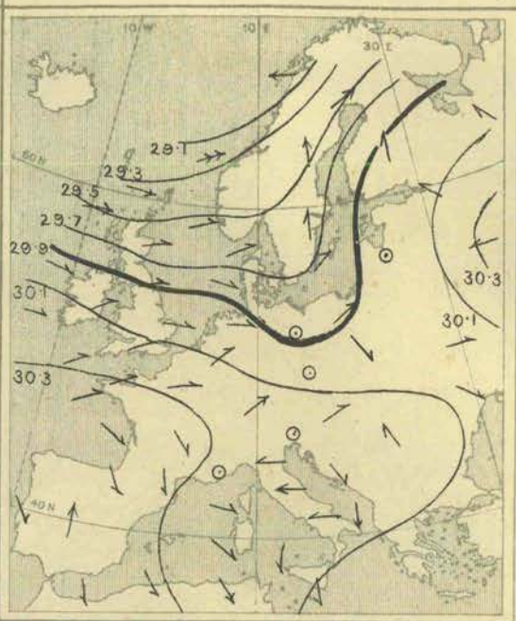
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather dull in the west and north of our Islands, with rain in the Shetlands and Hebrides, and with passing showers at several of our north-western stations; fair in the east and south generally. Dull in all but the southern parts of the Continent, with fog in Denmark and the Netherlands, as well as at some of the Russian and Austrian stations; snow falling at Haparanda, Ulcaborg, and Neufahrwasser. Rain occurring during day in the west, south, and extreme north of our Islands, as well as in Germany; snow falling over Sweden, as well as in the south of Russia.

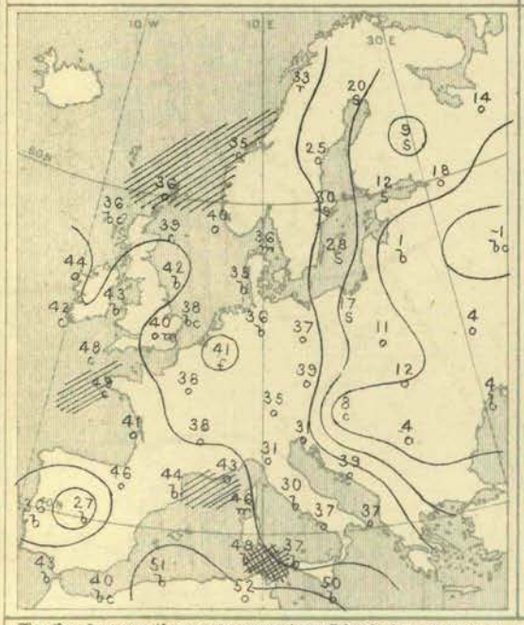
Temperature risen over England, France, Italy, and the eastern shores of the North Sea, fallen elsewhere. Morning readings highest, (1) 54° at La Calle, 51° at Barcelona, and 50° at Cagliari and Tunis; (2) 51° at Valencia Island, and 50° at Stornoway and Brest; above 45° in most parts of the United Kingdom. Lowest, − 10° Fahr. at Helsingfors, − 5° at Hangö, and − 3° at St. Petersburg and Memel; below 10° in Austria, Poland, and many parts of eastern Germany; below the freezing point over northern Italy. Rising during day to between 50° and 52° in most parts of the United Kingdom, as well as in the west and south of France, but reaching 56° at Perpignan. Remaining below 45° over the greater part of Italy.

Wind South-Westerly or Westerly over our Islands and on the eastern shores of the North Sea, fresh or strong in force on our extreme north and north-west coasts, Southerly in Sweden and Finland. Light from the North-Westward or Westward over France, Austria, and the south of Russia; North-Easterly in Spain and Italy. Strong from the North-Westward in Tunis and eastern Algeria, with a gale at La Calle. Subsequently falling moderate on our north-west coasts, but increasing to a strong breeze from the Westward in the north-east of Scotland, and to a gale from West-South-West at Christiansund.

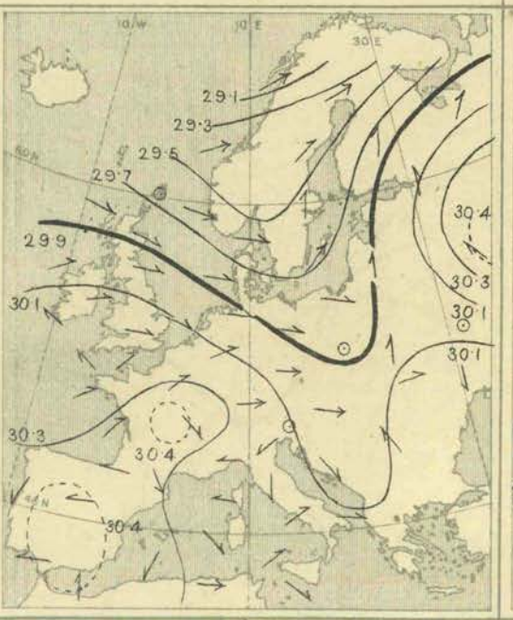
Barometer highest, 30·2 ins. to 30·5 ins. in an anticyclone lying over France, Spain, Algeria, and the south of England; 30·2 ins. and upwards in another system over central Russia. Lowest, 29·2 ins. and less in a depression lying off the north-west of Norway, 29·3 ins. and less in another disturbance near the Shetlands, 29·9 ins. and less in a shallow system lying to the southward of Italy. Depressions in north subsequently moving eastwards, and barometer rising on our extreme north and north-west coasts.

Wednesday, 25th January.

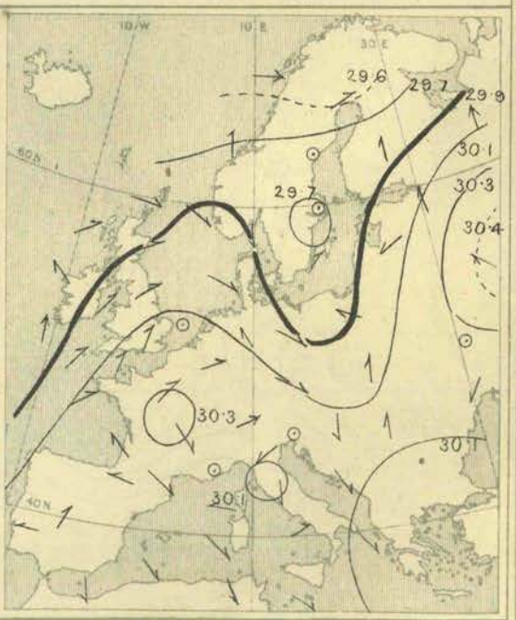
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fine over the greater part of our Islands, but misty or foggy at several of our southern stations. Fine also over Holland, Denmark, and the Baltic Provinces, as well as in Spain, Sicily, Algeria, and the south of Russia, dull in other parts of the Continent, with fog at some of the French and Belgian stations, and with snow in Sweden, Finland, and some parts of eastern Germany. Rainy weather setting in later over Ireland, and spreading quickly over a considerable portion of Great Britain; amounts rather large in the extreme west.

Temperature fallen in most parts of western and southern Europe, risen elsewhere—rapidly over eastern Germany and the Gulf of Finland. Morning readings highest, 52° at La Calle, 51° at Algiers, and 50° at Barcelona and Malta; above 45° in the extreme south-west of England. Lowest, − 1° Fahr. at Moscow, + 1° at Memel and Riga, 2° at Nicolaieff, and 4° at Kiev, Odessa, and Hermanstadt, below the freezing point over northern and eastern Europe generally, as well as over northern Italy and central Spain. Subsequently rising to between 45° and 50° in most parts of the United Kingdom, and to between 50° and 55° in the west and south of France. Remaining below 40° in the north of Italy.

Wind light to fresh from the Westward over the greater part of our Islands, as well as in Norway, Denmark, Germany, and the Netherlands, but light from the Eastward or South-Eastward on our extreme south-western coasts. Southerly over Sweden and northern Russia, with a gale at Ulcaborg, light and variable over Italy, Austria, and the south of Russia. Light from the South-Westward in the west of France, but Easterly or North-Easterly in Spain, and South-Easterly in Algeria. Subsequently shifting to the Southward in the west of our Islands, and increasing to a gale in Ireland.

Barometer highest, 30·4 ins. and upwards in an anticyclone lying over Spain, and also in another system over central Russia. Lowest, 29·1 ins. and less in a well-marked depression lying off the north-west of Norway. Depression subsequently travelling away to the north-eastward, but new disturbance approaching our western coasts: barometer falling quickly in Ireland, and less decidedly in most other parts of the United Kingdom and France.

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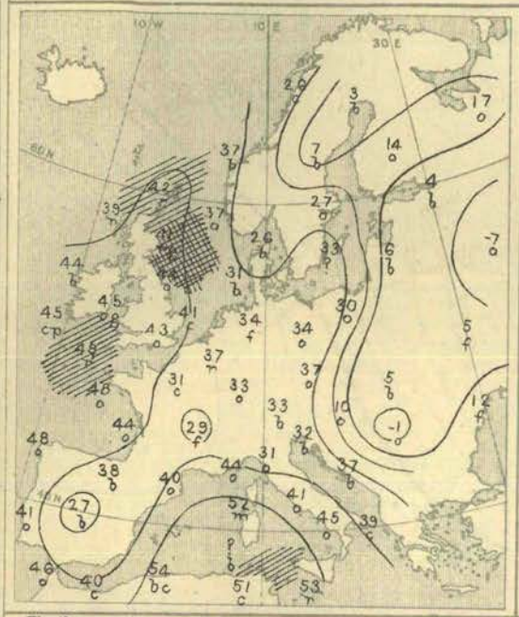
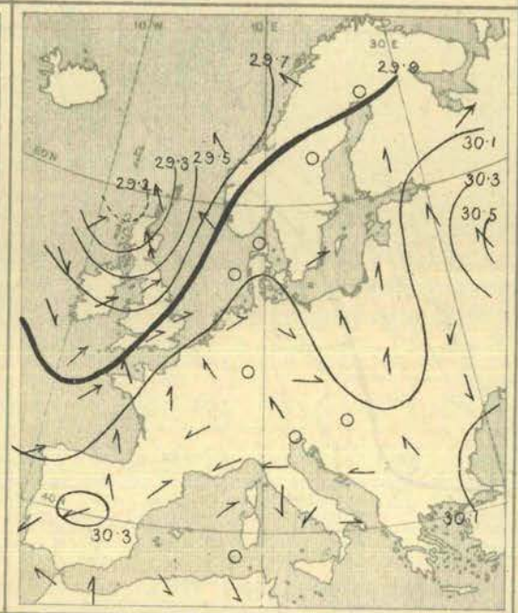
Thursday, 26th January.

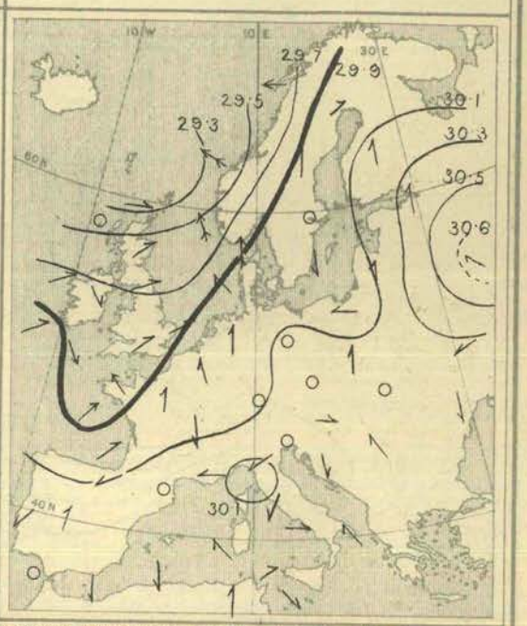
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather squally and rainy in most parts of the United Kingdom, and dull over France, Italy, and the greater part of central and eastern Europe, with snow at Warsaw, Cracow, and Nicolaieff. Fine and bright over Denmark and the northern parts of Scandinavia, as well as in Spain and Algeria. Sky clearing later at many of our western and northern stations, but steady rain falling in the south-east of England. No important change occurring on Continent.

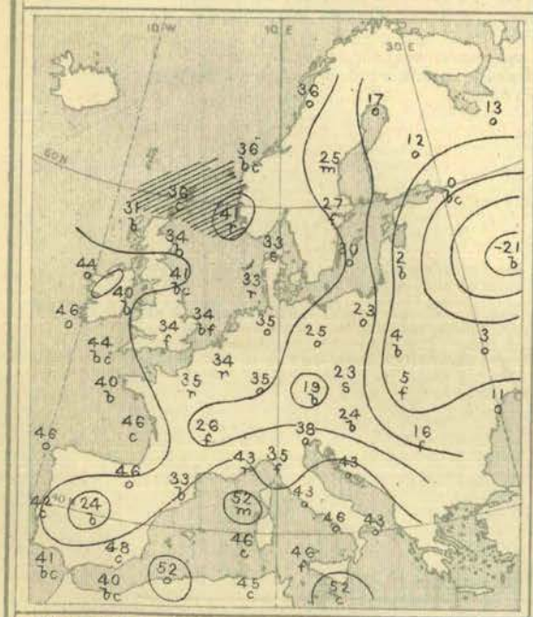
Temperature risen in our Islands, as well as over the Baltic, Italy, and the south of Russia, fallen in most other localities. Morning readings highest, (1) 54° at Algiers, 53° at Malta, 51° at La Calle, and 46° at San Fernando; (2) 48° at Scilly and Brest, and 47° at Leith and Lorient; varying between 40° and 45° in most parts of the United Kingdom. Lowest, – 7° Fahr. at Moscow, – 1° at Hermanstadt, + 2° at Kharkov, 3° at Haparanda, and 4° at St. Petersburg; considerably below the freezing point over Sweden, Russia, Austria, and northern Italy generally, slightly below it over the central parts of France and Spain. Daily maxima over our Islands varying in most places between 43° and 48°; thermometer exceeding 50° in the west and south of France, as well as in Spain and the southern parts of Italy, and reaching 59° at San Fernando.

Wind moderate to fresh from the North-Westward in our Islands; strong from the Southward in the western and northern parts of Great Britain, with a gale in the east of Scotland, and moderate from the same quarter over France and the south-east of England, South-Easterly in the west of Norway. Light to moderate from West or North-West in Germany; South-Easterly over the Baltic Provinces and Finland; calm and variable in Sweden. Light from the North-Eastward in the south of Russia and also over the greater part of Italy and Spain; variable in Algeria. Subsequently shifting to the Westward or North-Westward in many parts of Great Britain and falling light, but backing to the South-Westward in the west of Ireland. South-Easterly gale springing up in the west of Norway.

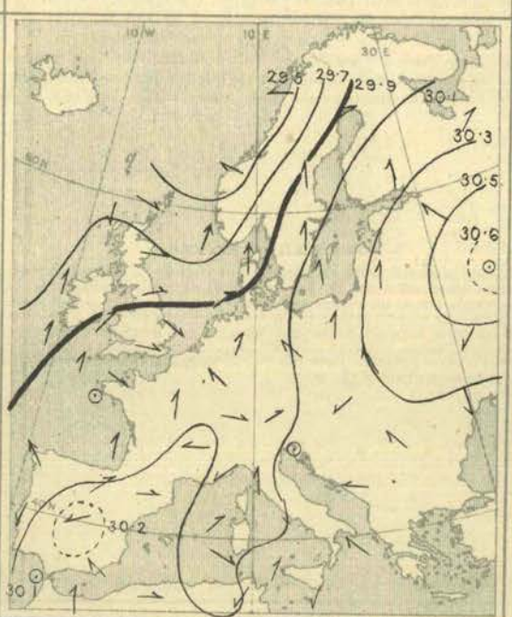
Barometer highest, 30·5 ins. and upwards in an anticyclone over central Russia; 30·1 ins. and upwards over the whole of eastern, central, and southern Europe. Lowest, 29·2 ins. and less in a "V" shaped depression having its centre off the north of Scotland. Depression subsequently travelling away in a north-easterly direction, and barometer rising in all the more western and northern parts of the United Kingdom. Well-marked secondary disturbance passing eastwards across England.

Friday, 27th January.

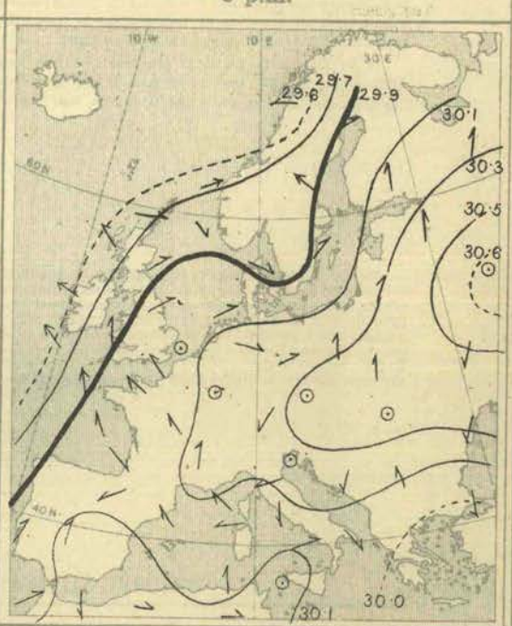
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fine over Great Britain and the north of France, as well as in Spain, Algeria, and central Russia, but foggy in the south-east of England. Dull elsewhere, with rain at some of the French, Belgian, Danish, and Norwegian stations, and with snow in the neighbourhood of the Skager Rack, as well as at Prague, Cracow, and Nicolaieff. Unsettled, rainy weather setting in later over the western and extreme northern parts of the United Kingdom. Dense fog experienced in many parts of the London area.

Temperature fallen generally, but risen decidedly in Sweden and also in Italy. Morning readings highest, (1) 52° at Sanguinaire, Algiers, and Malta, 47° at Barcelona, and 46° at several of the Mediterranean stations; (2) 47° at Roche's Point, and 46° at Valencia Island. Lowest, – 21° Fahr. at Moscow, – 1° at Kharkov, 0° zero at St. Petersburg, + 2° at Riga, and 3° at Kiev; below the freezing point in most parts of northern, eastern, and central Europe, as well as over the central parts of England, France, and Spain. Rising during day to between 45° and 50° in the west of our Islands, but not exceeding 35° in London. Exceeding 50° in the west and south of France, as well as in many parts of Spain and Italy, and reaching 63° at Palermo.

Wind light or moderate from the Southward on our western coasts, but South-Westerly or Westerly in the eastern parts of Great Britain, and Northerly at the Channel stations. Light Southerly over the greater part of France, Germany, Sweden, Finland, and the Baltic, strong from the same quarter in the south of Norway; Easterly or South-Easterly in the west of Norway. Variable over Austria and the south of Russia, Northerly or North-Easterly in Italy; variable in Spain and Algeria. Subsequently backing to the Southward or South-Eastward in nearly all parts of our Islands and increasing to a gale at several of our western stations. Veering to the South-Westward or Westward in the south of Norway.

Barometer highest, 30·6 ins. and upwards in an anticyclone lying over central Russia; 30·2 ins. and upwards in another system lying over central Spain. Lowest, 29·5 ins. and less in a large depression off the west of Norway; a "V" shaped secondary disturbance reported over the Netherlands and the north-east of France. New depression appearing later off the Irish coasts, and barometer falling briskly at all our western stations.

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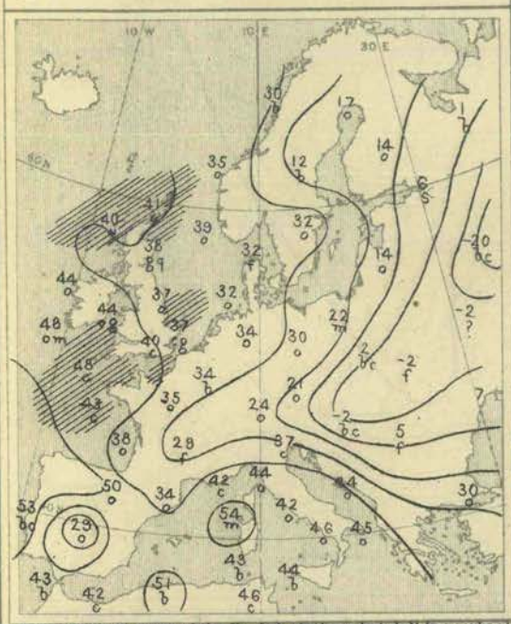
III.—SUMMARY OF WEATHER OVER EUROPE.

Saturday, 28th January.

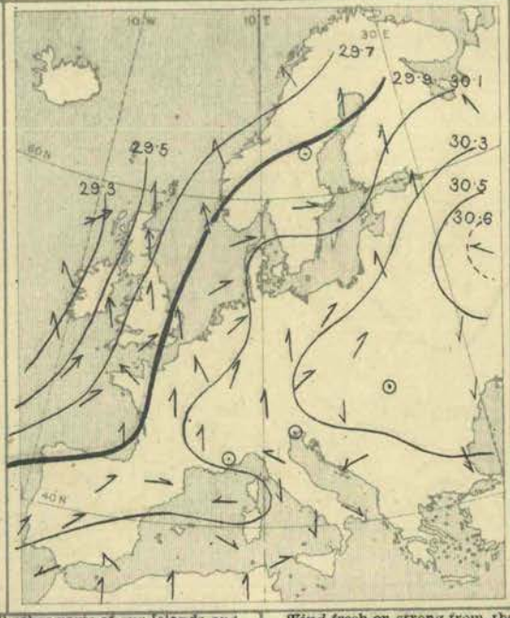
Temperature and Weather. 8 a.m.



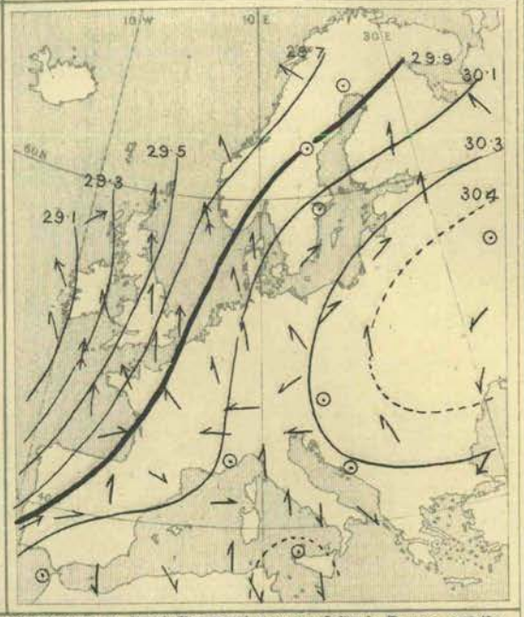
Weather fair at many of the English stations, but dull in nearly all other parts of our Islands and the Continent, with rain in some of our western and northern districts, and with snow over the Gulf of Finland, as well as at Turin. Fog reported in several parts of Poland and Austria, but weather fine and bright in Algeria, the south of Spain, and the extreme south of Italy. Rain falling later in nearly all parts of the United Kingdom, and also in the west of France, but sky clearing in many parts of central Europe.

emperature risen over our Islands, France, and Spain, and also over the Baltic, but fallen elsewhere. Morning readings highest, (1) 53° at Lisbon, 51° at Algiers, and 50° at Biarritz; (2) 48° at Valencia Island, Scilly, and Brest, and 47° at Roche's Point; above 40° at most of our own western and southern stations. Lowest, − 20° Fahr. at Moscow, − 10° at Kharkov, − 2° at Kiev, Lemberg, and Buda-Pesth, and + 1° at Archangel; considerably below the freezing point over Sweden, Russia, and Austria generally, and slightly below it over the central parts of France and Spain. Rising during day to between 45° and 48° in most parts of the United Kingdom, to 50° or more in the south of France, and to 55° or more in Spain and the south of Italy, the highest reading of all being 63° at Palermo.

Barometer and Wind. 8 a.m.



6 p.m.



Wind fresh or strong from the Southward or South-Eastward over our Islands, France, and the North Sea; light from the same quarters, over Finland, Germany, and the Baltic. Light from the Eastward or North-Eastward over the central and southern parts of Russia; Northerly or North-Westerly in Italy, light from the Southward in Spain and Algeria. Subsequently increasing to a gale from the Southward at the mouth of the Channel, and also in the south of Norway; no important change occurring elsewhere.

Barometer highest, 30·6 ins. and upwards over central Russia; 30·2 ins. and upwards in an anticyclone lying over nearly the whole of Russia, Austria, and eastern Germany. Lowest, 29·3 ins. and less in a depression lying to the westward of our Islands; gradients rather steep over the whole of our Islands and the North Sea. Brisk fall taking place during day on our western coasts, and gradients over the United Kingdom becoming rather steeper.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force is indicated thus: ⇛ = a heavy gale; ➤ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the left-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Germany, Sweden, and Norway, and 7 a.m. in France, Algeria, Italy, Austria, and Russia; that for 6 p.m. is prepared from observations made at 6 p.m. in the British Islands and France, 7 p.m. in Algeria, 8 p.m. in Sweden and Norway, Germany, and Austria, and 9 p.m. in Russia, Belgium, and Italy. The time indicated in each case is the standard time for each country.

GENERAL NOTES.

At the commencement of this period a large anticyclone extended from the Atlantic over Ireland, England, France, and Spain, while a second high-pressure system existed over Russia, the weather in the intervening regions being influenced by depressions which spread southwards over Denmark and the Baltic from the far north. On the 24th, however, the Atlantic anticyclone moved southwards, and at the same time spread out in an easterly direction, until it eventually became united with the Russian high-pressure area. The depressions, which were still advancing over Scandinavia from the westward, now pursued a more southerly course, their centres skirting the north of Scotland, and producing a considerable increase of wind from between South and West on our northern coasts generally. During the latter part of the week, when the anticyclone had receded well to the eastward, a series of disturbances began to move along our western coasts in a north-north-easterly direction, so that the wind over western Europe backed to the Southward, while unsettled weather became general. Over the United Kingdom the temperatures observed were fairly high for the time of year, but in the more eastern countries hard frost prevailed during the greater part of the week.

BRIGHT SUNSHINE Values for the Week in addition to those found on page 20.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	7·3	?	13	?	EASTBOURNE	12·4	?	20	?
OSWALDKIRK (Yorkshire)	7·1	?	12	?	TENBY	10·6*	?	18*	?
WORKSOP	6·5	− 3·4	11	− 4	NEWQUAY	14·0	?	23	?
THURCASTON (Leicestershire)	9·6	+ 1·2	14	+ 1	TORQUAY	16·2*	?	26*	?
MARGATE	5·8	?	10	?	ARLEY COTTAGE (County Cavan)	5·5	?	9	?
WESTBOURNE (Sussex)	11·6*	?	19*	?	GUERNSEY	14·6*	?	23*	?
BRIGHTON	10·7	?	17	?					

The values at Westbourne, Tenby, Torquay, and Guernsey are obtained by Jordan's Photographic Recorder.

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WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; R. H. SCOTT, F.R.S., SECRETARY.
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VOL. X. No. 5.] *Third Series.* WEEK ENDING SATURDAY, 4TH FEBRUARY, 1893. [*Price 6d.* [*Annual subscription, post paid*, £1 10s. 0d.

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871-90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty-five years 1866-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90, only. BRIGHT SUNSHINE.—*The Mean values* employed are those for the corresponding periods in the ten years 1881-90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

	DISTRICTS. (See p. 26.)	Observed during the Week. Highest.	Observed during the Week. Lowest.	Averages of Daily Maxima.	Averages of Daily Minima.	Averages of Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	For the Week. Difference from Mean.	For the Week. Below 42°	For the Week. Difference from Mean.	From January 1st, 1893. Above 42°	From January 1st, 1893. Difference from Mean.	From January 1st, 1893. Below 42°	From January 1st, 1893. Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
	0. SCOTLAND, NORTH	53	31	46·9	37·9	42·4	4 above.	20	+14	11	−23	34	− 1	217	+ 56
Principal Wheat-producing Districts.	1. SCOTLAND, EAST	54	30	46·6	36·4	41·5	4 above.	13	+ 4	23	−15	29	− 13	236*	+ 44
	2. ENGLAND, N.E.	53	33	46·0	37·4	41·7	3 above.	11	+ 3	19	−15	24	− 12	214*	+ 35
	3. ENGLAND, EAST	53	31	46·5	37·0	41·8	3 above.	13	+ 4	21	−18	23	− 17	278	+ 73
	4. MIDLAND COUNTIES	55	27	48·9	39·1	44·0	6 above.	26	+16	8	−31	41	− 8	251	+ 49
	5. ENGLAND, SOUTH	55	34	48·6	40·7	44·7	5 above.	24	+12	4	−25	35	− 23	231	+ 78
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	51	32	47·6	39·9	43·8	4 above.	21	+12	6	−21	52	+ 2	168	+ 30
	7. ENGLAND, N.W.	55	33	48·0	40·1	44·1	5 above.	23	+15	5	−23	45*	0	175*	+ 31
	8. ENGLAND, S.W.	55	35	50·0	43·0	46·5	5 above.	32	+16	0	−21	64	− 15	152	+ 47
	9. IRELAND, NORTH	54	31	49·1	40·7	44·9	4 above.	26	+12	4	−20	67	− 3	120	− 3
	10. IRELAND, SOUTH	57	33	51·7	42·9	47·4	5 above.	38	+17	0	−19	95	− 10	96	+ 2
	— CHANNEL ISLANDS	53	40	51·1	45·1	48·1	4 above.	43	+21	0	− 8	103	− 6	68	+ 22

Rainfall.

	DISTRICTS. (See p. 26.)	For the Week. Number of Rainy Days.	For the Week. Total Fall.	For the Week. More or less than the Mean for the Week.	From January 1st, 1893. Number of Rainy Days.	From January 1st, 1893. Difference from Mean.	From January 1st, 1893. Total Fall.	From January 1st, 1893. Difference from Mean.
			10ths of In.	10ths of In.			Ins.	Ins.
	0. SCOTLAND, NORTH	6	9	3 less.	28	+ 2	5·1	− 1·2
Principal Wheat-producing Districts.	1. SCOTLAND, EAST	4	3	3 less.	24	+ 5	2·2	− 1·0
	2. ENGLAND, N.E.	4	5	1 more.	20	+ 2	1·7	− 0·5
	3. ENGLAND, EAST	5	6	2 more.	25	+ 7	2·3	+ 0·1
	4. MIDLAND COUNTIES	6	8	3 more.	22	+ 4	2·2	− 0·5
	5. ENGLAND, SOUTH	5	6	0 (average)	21	+ 3	2·3	− 0·7
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	6	10	3 less.	23	0	2·8	− 3·8
	7. ENGLAND, N.W.	5	9	3 more.	21	0	2·0	− 1·6
	8. ENGLAND, S.W.	4	8	1 less.	20	− 1	3·1	− 1·6
	9. IRELAND, NORTH	6	9	2 more.	26	+ 3	3·2	− 0·8
	10. IRELAND, SOUTH	6	13	4 more.	22	0	4·4	− 0·3
	— CHANNEL ISLANDS	5	5	3 less.	24	+ 1	3·1	− 0·8

Bright Sunshine.

	DISTRICTS. (See p. 26.)	For the Week. Hours recorded.	For the Week. Difference from Mean.	For the Week. Percentage of possible Duration.	For the Week. Difference from Mean.	From January 1st, 1893. Hours recorded.	From January 1st, 1893. Difference from Mean.	From January 1st, 1893. Percentage of possible Duration.	From January 1st, 1893. Difference from Mean.
	0. SCOTLAND, NORTH	8	+ 2	14	+ 2	35	+ 4	14	+ 2
Principal Wheat-producing Districts.	1. SCOTLAND, EAST	14	− 3	23	− 4	40	−19	15	− 8
	2. ENGLAND, N.E.	12	+ 2	20	+ 2	42	+ 1	15	0
	3. ENGLAND, EAST	8	− 6	12	− 9	44	−15	15	− 6
	4. MIDLAND COUNTIES	11	− 1	18	− 1	48	− 1	17	0
	5. ENGLAND, SOUTH	12	0	20	0	42	− 7	14	− 3
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	12	+ 1	20	+ 3	52	+13	19	+ 5
	7. ENGLAND, N.W.	11	+ 1	18	+ 2	38*	− 3	13	− 2
	8. ENGLAND, S.W.	15	+ 1	24	+ 3	69	+11	23	+ 3
	9. IRELAND, NORTH	12	0	20	0	42	− 8	15	− 3
	10. IRELAND, SOUTH	14	− 1	22	− 1	48	−14	17	− 5
	— CHANNEL ISLANDS	15	− 3	22	− 6	56	−25	18	− 8

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather continued mild in all parts of the Kingdom, with generally cloudy skies, and frequent, but not heavy, falls of rain.

Temperature exceeded the mean in all districts, the excess ranging from 3° in England E. and N.E., to 4° or 5° in most other districts, and to 6° in the Midland Counties. The highest of the maxima were recorded on somewhat irregular dates, and ranged from 57° in Ireland S., and 55° in the more southern and western parts of England, to 53° in some of the northern and north-eastern districts and the Channel Islands. The lowest of the minima were registered on January 29th at most of the English stations, and on later dates in Ireland and Scotland; they ranged from 27° in the Midland Counties, to 35° in England S.W., and to 40° in the Channel Islands.

Rainfall was rather more than the mean in Ireland, England E. and N.E., the Midland Counties, and England N.W., and just equal to it in England S., elsewhere the fall was a little less than the normal amount.

Bright Sunshine did not differ materially from the mean, being slightly in excess in some districts and a little deficient in others. The percentage of the possible duration ranged from 24 in England S.W. to 12 in England E.

Barometer and Wind.—During the earlier part of the period the barometer was highest in the south and lowest in a series of depressions which moved north-north-eastwards, along our western and north-western coasts. Winds between South and South-West were consequently general, and occasionally blew with the force of a gale on our west and north-west coasts. During the night of January 31st—February 1st a small secondary disturbance travelled quickly eastwards across Ireland and England, and as it passed away to the south-eastward of our Islands, the wind increased to a strong gale from the Westward at the mouth of the Thames. Towards the end of the week a large anticyclone was spreading westwards over our Islands, and the wind had shifted to the Southward very generally.

* This value has been altered slightly owing to the receipt of further information.

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II.—DATA from which the SUMMARY on page 25 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°				Inches	Inches.				
0. SCOTLAND, N.	Sumburgh Head	49	36	45·4	39·6	42·5	+ 3·4	14	7	7	0·81	−0·01	*	*	*	*
	Stornoway	49	34	47·1	36·9	42·0	+ 2·8	14	14	7	0·37	−0·73	11·9	+ 1·9	21	+ 2
	Wick	48	34	45·3	37·7	41·5	+ 3·5	9	17	5	0·23	−0·20	*	*	*	*
	Lairg ℌ	51	31	46·9	34·4	40·7	+ 4·4	14	30	5	0·19	−0·59	*	*	*	*
	Glencarron ℌ	53	32	47·6	37·2	42·4	+ 4·9	23	13	7	1·83	−0·24	*	*	*	*
	Fort Augustus ℌ	51	33	48·2	39·3	43·8	+ 5·0	24	8	6	0·63	−0·38	5·0	?	9	?
	Fort William ℌ	52	35	47·5	39·9	43·7	+ 4·5	21	6	7	2·29	+0·10	6·9	?	12	?
1. SCOTLAND, E.	Nairn	52	32	49·4	37·1	43·3	+ 5·3	30	14	2	0·07	−0·33	*	*	*	*
	Aberdeen	49	34	45·9	36·3	40·7	+ 2·5	8	22	3	0·16	−0·36	11·9	− 2·7	21	− 5
	Braemar ℌ	46	30	43·0	34·9	39·0	+ 4·0	3	26	3	0·23	−0·52	14·0†	?†	24†	?†
	Ochtertyre ℌ	49	32	46·3	36·0	41·2	+ 4·3	12	24	7	0·83	−0·27	*	*	*	*
	Leith	54	37	49·6	39·1	44·4	+ 4·9	29	8	5	0·22	−0·18	*	*	*	*
	Marchmont ℌ	48	32	46·0	35·0	40·5	+ 3·4	11	27	4	0·29	−0·31	13·0	?	22	?
2. ENGLAND, N.E.	Alnwick Castle	53	35	45·3	38·1	41·7	+ 3·6	9	16	5	0·30	−0·18	*	*	*	*
	Durham	50	33	46·4	36·1	41·3	+ 3·7	12	24	6	0·54	+0·12	11·4	− 1·0	19	− 1
	Shields	53	35	47·9	37·4	42·7	+ 3·6	24	13	2	0·76	+0·36	*	*	*	*
	Scarborough ℳ	52	35	45·7	37·3	41·5	+ 2·5	10	19	4	0·38	−0·08	*	*	*	*
	York	53	35	47·9	38·3	43·1	+ 4·6	23	10	4	0·57	+0·12	13·1	+ 3·2	21	+ 6
	Spurn Head	49	36	42·6	37·3	40·0	+ 1·5	2	17	5	0·44	+0·12	*	*	*	*
3. ENGLAND, E.	Hillington ℳ	51	31	45·9	35·7	40·8	+ 2·8	11	25	5	0·88	+0·46	5·0	− 7·6	8	−12
	Yarmouth	51	34	43·9	36·3	40·1	+ 1·8	5	21	4	0·47	+0·02	*	*	*	*
	Geldeston	52	32	46·5	36·2	41·4	+ 2·4	13	24	4	0·45	+0·08	10·1	− 4·1	16	− 7
	Cambridge	53	35	48·3	38·3	43·3	+ 4·8	25	10	6	0·42	+0·02	7·0	− 6·1	11	−10
	Rothamsted	52	34	47·9	38·7	43·3	+ 5·4	23	9	6	0·82	+0·24	8·7	?	14	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	54	27	47·1	36·0	41·6	+ 3·2	14	25	6	0·70	+0·31	*	*	*	*
	Loughborough	55	36	49·1	39·7	44·4	+ 5·7	26	6	5	0·61	+0·11	*	*	*	*
	Stamford (Ketton Hall)	52	24	47·1	38·3	42·7	+ 4·0	20	10	6	0·55	+0·17	*	*	*	*
	Cheadle ℳ	51	34	47·5	37·2	42·4	+ 5·4	23	13	7	1·25	+0·67	*	*	*	*
	Churchstoke ℳ	53	37	49·3	40·1	44·7	+ 6·2	27	5	5	0·74	+0·09	14·1	+ 1·7	23	+ 3
	Hereford ℳ	54	36	50·8	40·0	45·4	+ 6·2	32	6	4	0·49	−0·07	*	*	*	*
	Cirencester	52	36	50·3	39·9	45·1	+ 6·9	31	6	5	0·91	+0·24	11·7	− 1·8	19	− 3
	Oxford	53	37	49·9	41·3	45·6	+ 6·0	28	2	6	1·05	+0·54	6·3	− 3·5	13	− 6
5. ENGLAND, S.	London	54	34	50·0	40·1	45·1	+ 5·3	30	5	5	0·53	+0·06	9·0†	+ 1·1†	15†	+ 4†
	North Foreland	53	34	47·4	39·7	43·6	+ 3·8	21	6	4	0·43	?	*	*	*	*
	Strathfield Turgiss ℳ	52	37	49·3	40·9	45·1	+ 6·1	26	3	6	0·78	+0·26	*	*	*	*
	Dungeness	49	37	45·9	40·3	43·1	+ 3·1	15	5	6	0·50	−0·06	*	*	*	*
	Hastings (St. Leonards)	50	34	47·5	39·1	43·3	+ 3·1	21	8	4	0·74	+0·15	16·5	+ 0·5	26	+ 2
	Southampton	55	34	50·9	41·9	46·4	+ 6·2	31	0	5	0·46	−0·22	10·1	− 2·9	16	− 4
	Hurst Castle	51	40	48·0	42·0	45·0	+ 4·0	21	0	4	0·42	−0·23	*	*	*	*
	Stowell ℳ	52	39	49·7	41·9	45·8	+ 7·0	27	0	6	0·57	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	51	32	48·6	39·3	44·0	+ 3·3	25	8	7	1·60	−0·32	*	*	*	*
	Glasgow	50	36	47·2	40·0	43·6	+ 4·7	20	6	4	0·57	−0·35	8·3	− 0·2	14	0
	Ardrossan	49	36	47·0	39·7	43·4	+ 3·0	19	6	6	0·42	−0·48	*	*	*	*
	Glenlee ℌ	49	36	47·3	39·0	43·2	+ 5·4	21	8	7	1·17	−0·41	*	*	*	*
	Douglas (Isle of Man)	50	38	44·9	41·4	44·7	+ 4·1	21	2	5	1·04	+0·04	15·2	+ 2·6	25	+ 4
7. ENGLAND, N.W.	Newton Reigny	50	33	47·1	37·0	42·1	+ 5·0	22	14	5	0·73	−0·09	12·1	+ 0·8	20	+ 1
	Stonyhurst	50	36	46·5	39·9	43·2	+ 4·7	17	6	6	1·12	+0·25	12·8	+ 1·8	21	+ 3
	Blackpool ℳ	52	36	47·0	39·8	43·4	+ 4·6	19	6	5	1·09	+0·44	8·2	− 2·8	13	− 4
	Manchester	55	38	48·5	39·6	44·1	+ 5·4	25	7	6	0·92	+0·32	7·7†	?†	12†	?†
	Liverpool Obsy. (Bidston)	52	34	49·1	39·4	44·3	+ 4·1	27	7	5	0·86	+0·42	*	*	*	*
	Llandudno ℳ	53	38	49·5	42·5	46·0	+ 4·3	28	0	4	0·82	+0·22	15·2	+ 3·2	25	+ 5
	Holyhead	50	39	45·4	42·4	45·4	+ 3·4	24	0	6	1·03	+0·33	*	*	*	*
8. ENGLAND, S.W.	Llandovery	52	38	50·1	40·9	45·7	+ 4·7	31	3	5	0·79	−0·31	*	*	*	*
	Pembroke	50	42	48·6	44·3	46·5	+ 4·1	32	0	4	0·35	−0·43	17·7	+ 2·8	29	+ 6
	Arlington (N. Devon)	50	38	48·4	40·9	44·7	+ 4·9	24	3	5	0·77	−0·22	*	*	*	*
	Cullompton ℳ	55	38	51·6	42·7	47·2	+ 7·0	36	0	3	0·73	+0·01	14·2	+ 2·2	23	+ 5
	Falmouth	53	42	51·2	45·6	48·4	+ 4·4	45	0	3	0·95	−0·20	16·3	+ 1·5	25	+ 3
	Plymouth	53	41	50·8	44·5	47·7	+ 5·5	40	0	4	1·09	+0·25	10·9	− 2·6	17	− 4
	Prawle Point	52	35	48·9	42·0	45·5	+ 3·5	25	0	5	0·58	−0·06	*	*	*	*
9. IRELAND, N.	Malin Head	52	38	48·1	41·4	44·8	+ 3·4	22	2	7	0·38	?	*	*	*	*
	Londonderry	53	35	48·9	41·1	45·0	+ 4·5	25	3	6	0·87	+0·02	*	*	*	*
	Edenfel (Omagh)	50	32	47·7	39·1	43·4	+ 4·0	22	8	5	0·66	−0·04	*	*	*	*
	Mullaghmore	54	38	50·3	41·3	45·8	+ 3·5	30	2	7	1·31	+0·44	*	*	*	*
	Belmullet	53	38	49·7	42·3	46·0	+ 3·5	28	0	7	1·94	?	*	*	*	*
	Markree Castle	53	31	49·8	39·8	44·8	+ 4·7	29	6	7	1·29	+0·57	10·1	− 2·3	17	− 2
	Brookeborough	52	31	49·2	39·3	44·3	+ 5·3	27	8	5	0·82	−0·08	*	*	*	*
	Armagh	51	33	48·7	40·8	44·8	+ 5·3	25	3	3	0·57	−0·03	15·5	+ 3·1	25	+ 6
	Donaghadee	51	34	49·1	41·3	45·2	+ 4·4	25	2	5	0·35	−0·28	*	*	*	*
	Edgeworthstown	?	32	?	39·9	?	?	?	?	5	0·80	+0·11	*	*	*	*
10. IRELAND, S.	Dublin	55	37	51·2	43·0	47·1	+ 5·1	36	0	3	1·04	+0·54	20·2	+ 6·0	33	+10
	Parsonstown	53	34	50·9	39·1	45·0	+ 4·2	33	8	5	1·37	+0·75	10·6	− 3·2	17	− 5
	Kilkenny	53	36	51·4	41·7	46·6	+ 4·9	33	1	7	1·34	+0·60	*	*	*	*
	Waterford	55	39	50·9	43·3	47·1	+ 4·1	36	0	6	0·67	−0·35	*	*	*	*
	Roche's Point	53	39	51·1	43·3	47·2	+ 3·4	36	0	6	1·06	−0·14	*	*	*	*
	Valencia	53	38	52·3	44·4	48·4	+ 3·4	45	0	7	1·91	+0·51	10·2	− 5·4	16	− 9
	Killarney	57	33	53·7	43·0	48·4	+ 4·6	45	0	7	2·11	?	*	*	*	*
	Foynes	55	39	52·3	45·0	48·7	+ 5·9	47	0	6	0·90	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	53	43	51·9	46·0	49·0	+ 3·2	49	0	3	0·36	−0·44	*	*	*	*
	Jersey	52	40	50·3	44·1	47·2	+ 4·7	36	0	6	0·53	−0·15	14·6	− 3·4	22	− 6

Stations marked ℳ are in connection with the Royal Meteorological Society, and those marked ℌ with the Scottish Meteorological Society.

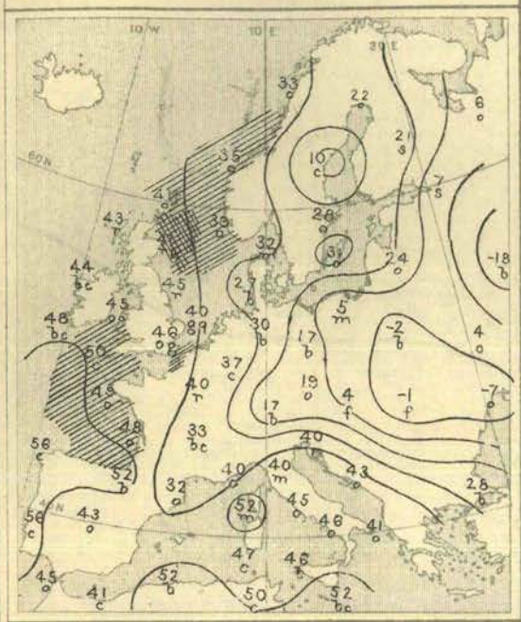
* An asterisk is inserted in all places for which the information is not usually received.

† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

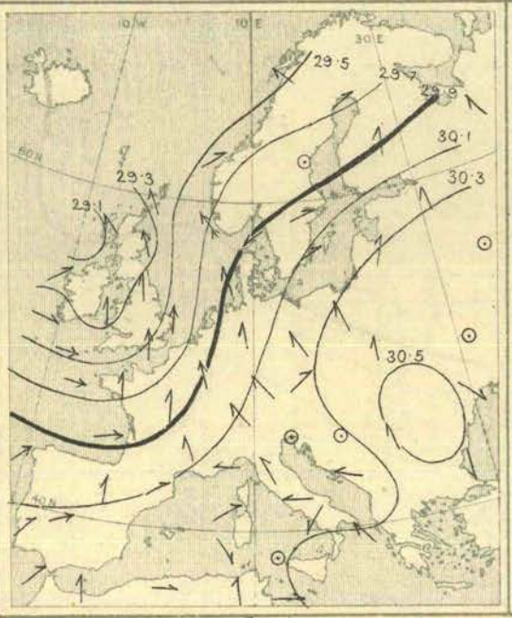
III.—SUMMARY OF WEATHER OVER EUROPE.

Sunday, 29th January.

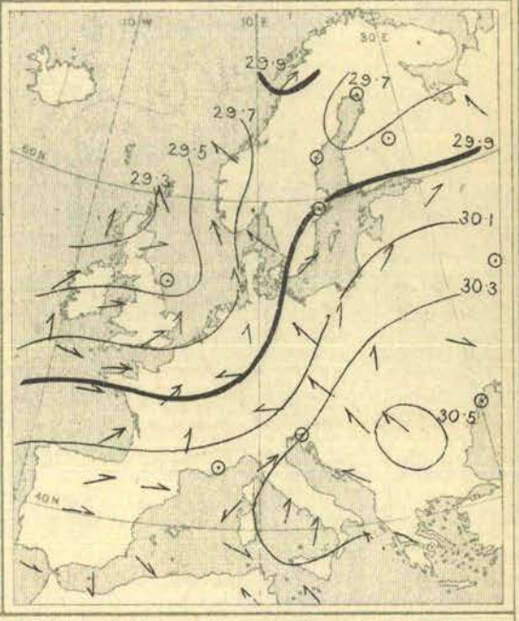
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather squally and showery in many parts of Great Britain, but fine over Ireland, Denmark, and central Europe; dull in nearly all other parts of the Continent, with fog in Austria, rain in the north of France and at Trieste, snow at Knopio, St. Petersburg, and Nicolaieff. Showers over central and southern Europe later (heavy at Sanguinaire), some improvement over Great Britain, but dull, showery weather setting in over Ireland.

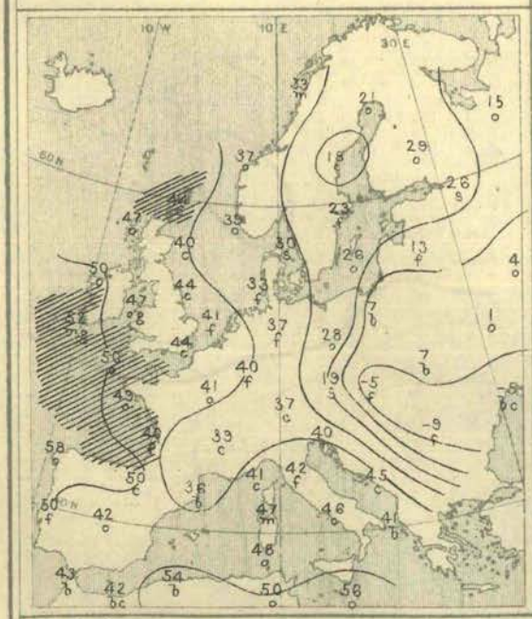
Temperature risen in most parts of western Europe and also in Russia, fallen elsewhere. Morning readings highest, 56° at Corunna and Lisbon, 54° at Barcelona, and 52° at Biarritz, Algiers, and Malta; above 45° in many parts of England, and also in the west of France. Lowest, − 18° Fahr. at Moscow, − 10° at Cracow, − 7° at Odessa, and − 4° at Kharkov; below + 10° in most parts of Russia, Poland, and Austria, and below 20° at several of the Swedish and German stations. Rising during day to between 50° and 53° in many parts of the United Kingdom, and to 55° or more in the west of France and in Italy, to 59° at Biarritz and Cagliari, and to 60° and more on the Algerian coast.

Wind moderate to strong from the Westward in the south of our Islands and the west of France, and from the Southward or South-Eastward in the eastern and northern parts of the United Kingdom, light in Germany, Denmark, and the west of Norway. Light or moderate from South-West over Sweden and the Baltic Provinces; variable over the central and southern parts of Russia, South-Easterly in Austria, Easterly or North-Easterly in Italy. Fresh or strong from the South-Westward in Spain, variable in Algeria.

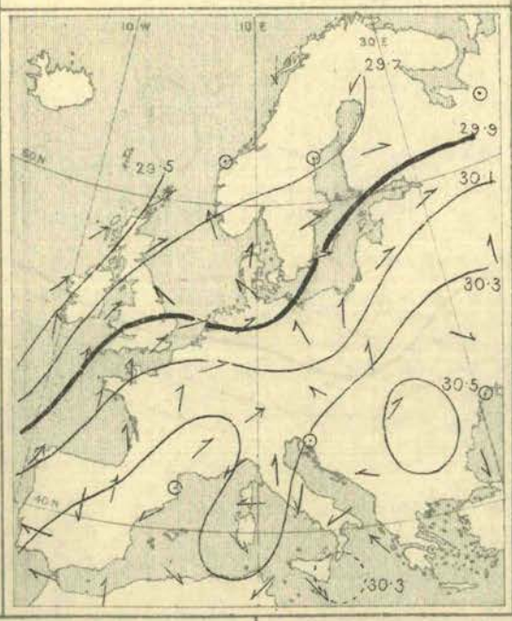
Barometer highest, 30·4 ins. to 30·5 ins. over Austria, the Black Sea, and the central and southern parts of Russia; 30·1 ins. and upwards over nearly the whole of central, southern, and eastern Europe, with the Mediterranean. Lowest, 29·1 ins. and less in a depression lying off the west of Scotland, and below 29·3 ins. in secondary disturbances lying over the Irish Channel. Depression in north-west subsequently moving away in a north-north-easterly direction, but new system beginning to approach the Irish coasts in evening.

Monday, 30th January.

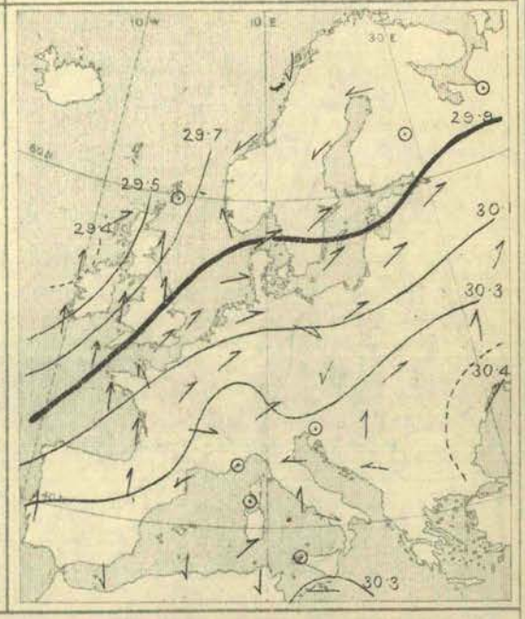
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright on the southern side of the Mediterranean, as well as over eastern Prussia, the Baltic Provinces, Holland, and the extreme east of England, foggy over the Netherlands generally, and in some parts of France; cloudy or overcast, and unsettled, over the United Kingdom—especially in the west. Rain falling later in most parts of our Islands, Scandinavia, Germany, Austria, and the west of France, but amounts small except in a few localities.

Temperature changing irregularly; fallen decidedly over the Baltic Provinces, and slightly over England, risen over central Europe and in Ireland. Morning readings, 50° and more at stations on the southern and western shores of the Mediterranean, as well as in the west and south of Ireland and at Scilly; exceeding 40° over the United Kingdom generally, the greater part of France, and the whole of Italy. Lowest, − 9° at Hermanstadt, − 5° at Cracow and Odessa, 0° (zero) Fahr. at Warsaw, + 1° at Kiev, 4° at Moscow, 7° at Neufahrwasser. Rising later to 50° or more in many parts of our Islands and France, and to 63° at Biarritz and on the Algerian coast, and to 65° at Palermo.

Wind Southerly to South-Westerly over western and north-western Europe, as a whole, and blowing very strongly at several of the western stations; very light from South-West over the Baltic, very light and variable elsewhere—but Northerly over Italy and Tunis, South-Easterly over the Adriatic. Blowing a gale on our extreme north-west coasts later, and freshening considerably from South even over England, and slightly from South-West over the Baltic. Remaining very light and variable over the Mediterranean.

Barometer highest, 30·5 ins. and more to 30·1 ins. over south-eastern, south-western, and the greater part of central Europe. Lowest, 29·5 ins. and less off our extreme west and south-west coasts. Gradients very variable, but mainly favourable for Southerly to South-Westerly winds over the north-western and northern countries. Falling over the United Kingdom later, most in the west, rising over the Baltic, Germany, and France, falling over south-eastern Europe; changes very moderate.

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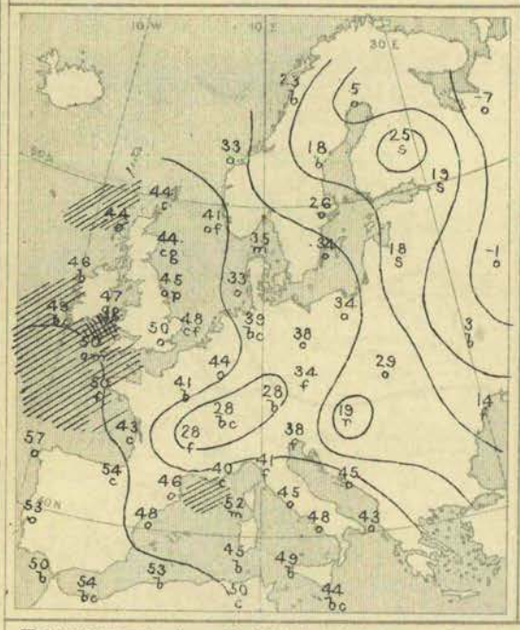
III.—SUMMARY OF WEATHER OVER EUROPE.

Tuesday, 31st January.

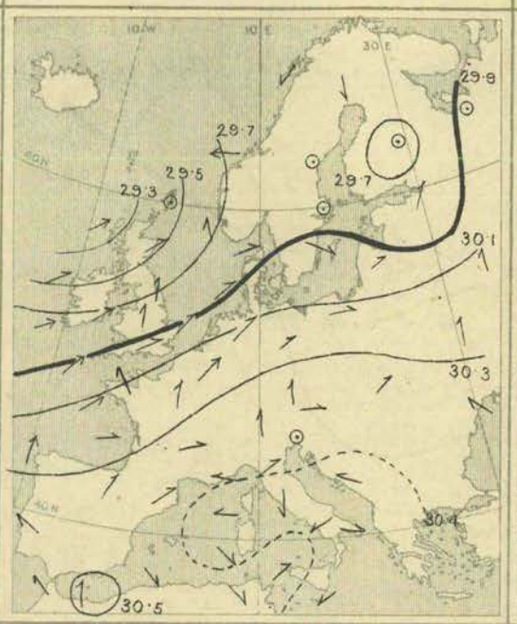
Temperature and Weather.

8 a.m.

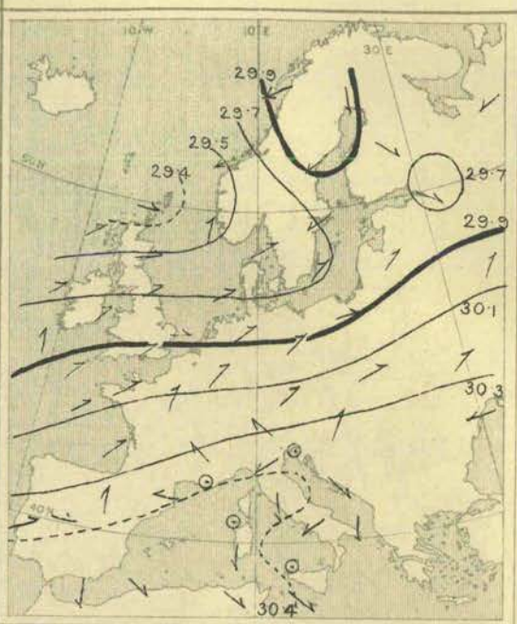


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning fine and bright at most stations on the southern shores of the Mediterranean, and in the south and west of Ireland, and at several stations over the British Islands and north-western Europe, cloudy or overcast elsewhere. Changeable over north-western and northern Europe generally, with showers in some places. Rain at times during day throughout Scandinavia, the United Kingdom and France—amounts moderate, as a rule, but considerable over the northern Departments, and in the Netherlands.

Temperature in morning, 50° to 54° on the Algerian coast, and 53° to 57° on the western and northern coasts of the Peninsula, 50° at Brest and Scilly, lower elsewhere; above 40° over the British Islands and France generally. Lowest, – 7° Fahr. at Archangel, – 1° to + 3° at stations over central Russia; 5° at Haparanda, 18° at Hernösand and Riga, but much higher at the Baltic coast stations. Rising later to between 50° and 53° at many of our own stations, to between 50° and 55° in many parts of France, to 60° and more in the south of Italy and over Algeria, and to 64° at Biarritz.

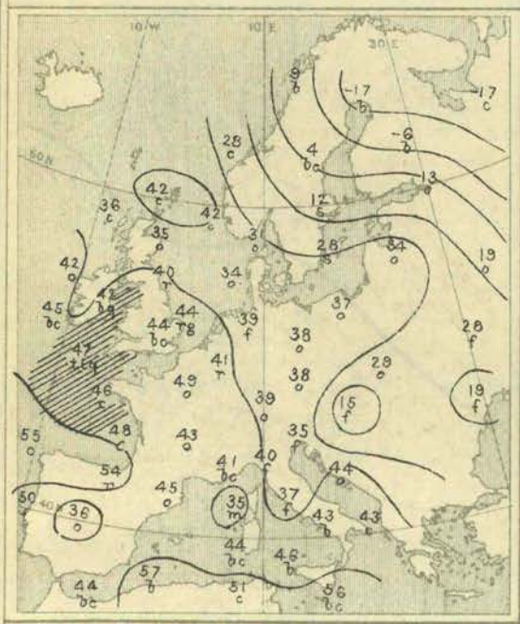
Wind South-Westerly to Southerly over the British Islands, the North Sea, and the German Ocean—moderate to fresh in force generally, but blowing strongly at several of our own coast stations, and a moderate gale at Corunna; light to moderate, and variable, over the eastern, central, and southern countries, as well as over the Mediterranean. Force varying over our Islands later—decreasing as a whole; little change over France and Germany, but a strong North-Easterly current setting in over the northern half of Scandinavia.

Barometer highest, 30·4 ins. and more to 30·0 ins. over Spain, France, central and eastern Europe, and the Mediterranean. Lowest, 29·7 ins. and less in a shallow depression over Finland, and 29·3 ins. and less in a larger system off the north-west of Scotland. Gradients moderate over the United Kingdom, slight elsewhere. Rising at our northern and north-western stations later, owing to the breaking up of the Atlantic depression, falling over France.

Wednesday, 1st February.

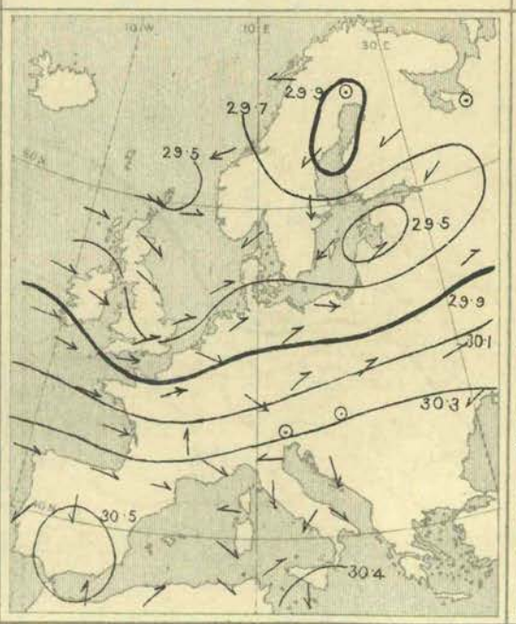
Temperature and Weather.

8 a.m.

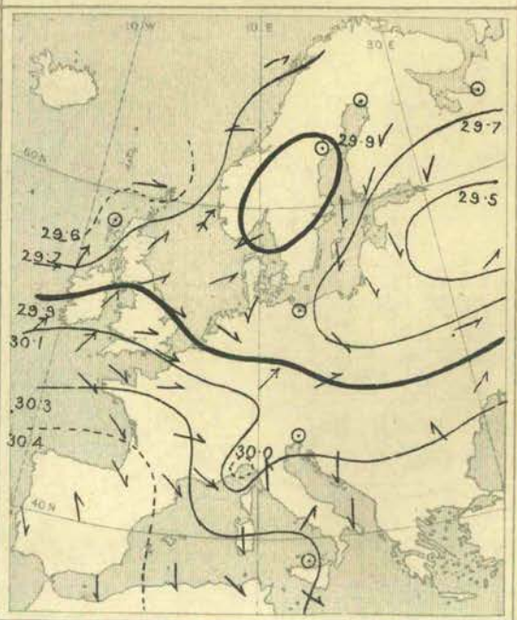


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning fine generally over the southern, fair over the northern, parts of the Mediterranean; fine also over Finland and the north of Scandinavia, and temporarily so at several of our own western stations; dull and unsettled elsewhere, and very changeable over the northern and north-western countries generally. Rain falling later throughout our Islands, Germany, and the greater part of France, but amounts inconsiderable except in Ireland, and at some Dutch stations; slight falls in the north of Italy also, and some snow over central Russia.

Temperature changing fitfully—fallen over the British Islands; risen slightly over Germany, rapidly over southern and central Russia. Above 50° at Malta, La Calle, Algiers, and most of the Spanish coast stations, exceeding 40° over France, England, and Ireland, and above the freezing point over Germany. Lowest, – 6° to – 17° Fahr. over Finland and the north of Russia, + 13° at St. Petersburg, 19° at Moscow and Odessa. Rising to 50° and more on our extreme south-west coasts later, as well as in the west of France, and touching 64° at Perpignan, and 68° to 70° on the Algerian coast, but not so high over Italy as of late.

Wind very variable over the Mediterranean, chiefly Westerly over western and central Europe—moderate in most places, but very strong to a moderate gale over the eastern half of the English Channel; Westerly over the southern parts of the Baltic, but Northerly to North-Easterly over the Gulf of Finland and the south of Sweden, and blowing strongly at Stockholm and Wisby. Rising to a gale from West over the lower parts of the Thames later, backing to South-West in Ireland, and freshening decidedly. The Northerly wind over Finland beginning to give way.

Barometer highest, (1) 30·5 ins. and more over Spain, and ranging between 30·4 ins. and 30·0 ins. over all the southern and south-eastern countries; (2) exceeding 29·9 ins. over the northern half of Sweden and the Gulf of Bothnia. Lowest, 29·5 ins. and less in a depression over the Gulf of Riga and its neighbourhood, as well as in another near the Shetlands; 29·6 ins. and less in a secondary off the north-east coast of England. Latter disturbance moving eastwards later but a new and larger one approaching our north-western coasts from the Atlantic.

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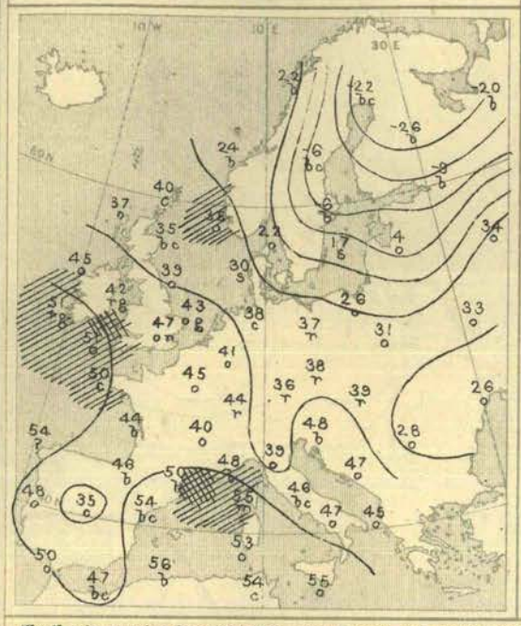
III.—SUMMARY OF WEATHER OVER EUROPE.

Thursday, 2nd February.

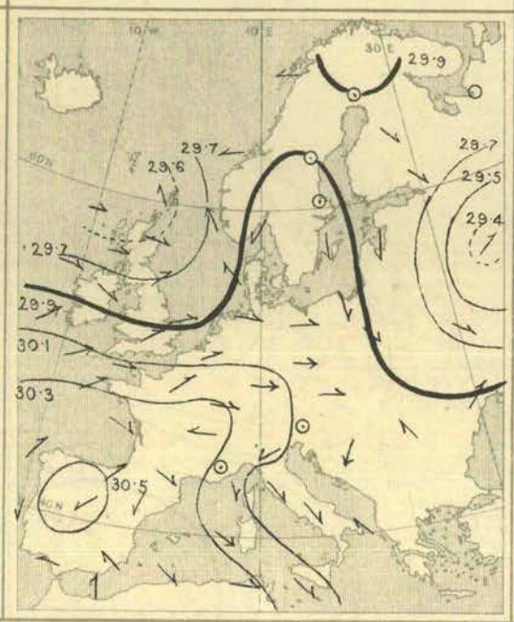
Temperature and Weather. 8 a.m.

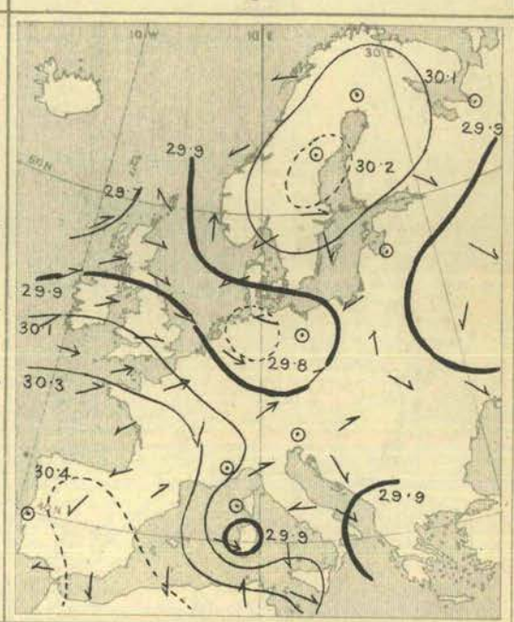


Weather in morning fine and bright over Algeria and south-western Europe, also over Finland and the greater part of Scandinavia; very changeable elsewhere—temporarily clear in some places, gloomy and rainy in others, with fog at Swinemunde and Breslau, snow at Fanö, Wisby, and Kharkov. Rain later at nearly all stations in the British Islands, the north of France and Germany, but amounts moderate or slight except in some parts of central Europe.

Temperature risen over the British Islands, changed irregularly elsewhere. Morning readings exceeding 50° on the Algerian coast, at Corunna, and in the extreme south-west of our Islands. Exceeding 40° over nearly the whole of western Europe, and exceeding the freezing point over the greater part of central Europe. Lowest, – 12° Fahr. to – 26° Fahr. over Finland and the north of Russia, – 9° at St. Petersburg, – 6° at Hernösand and Stockholm. Rising later to between 50° and 54° over our southern and south-western districts, and in the west of France, and touching 62° at Perpignan, but not exceeding 45° to 48° at our northern stations.

Barometer and Wind. 8 a.m. and 6 p.m.



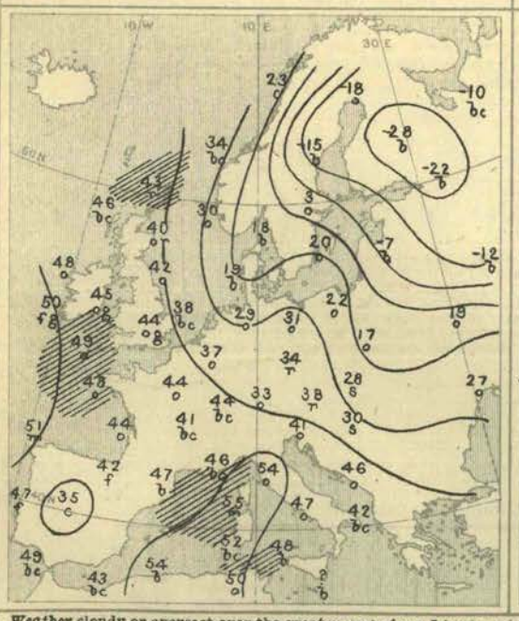


Wind very variable. (1) Westerly and South-Westerly over the British Islands, and the greater part of France and Germany; Southerly and variable on the eastern shores of the North Sea; South-Easterly to Easterly in Norway; (2) Northerly over the Baltic, North-Westerly over Poland, South-Westerly over the south of Russia; (3) light and anticyclonic over south-western Europe; (4) North-Westerly over the eastern side of the Mediterranean. Backing to South-West and South in Ireland later, and shifting to East over Denmark.

Barometer highest, 30·5 ins. and more to 30·4 ins. over Spain and the south-west of France, and exceeding 30·0 ins. over the southern part of our Islands, the Channel, and the western continental countries generally; exceeding 29·9 ins. in a "col" over Scandinavia and north Germany. Lowest, about 29·4 ins. over central Russia; 29·6 ins. and less in the Shetlands and north of Scotland, and about 29·9 ins. over south-eastern Europe. Rising over the United Kingdom and North Sea later, most in the north-east, but a well-formed depression appearing over Sardinia towards evening.

Friday, 3rd February.

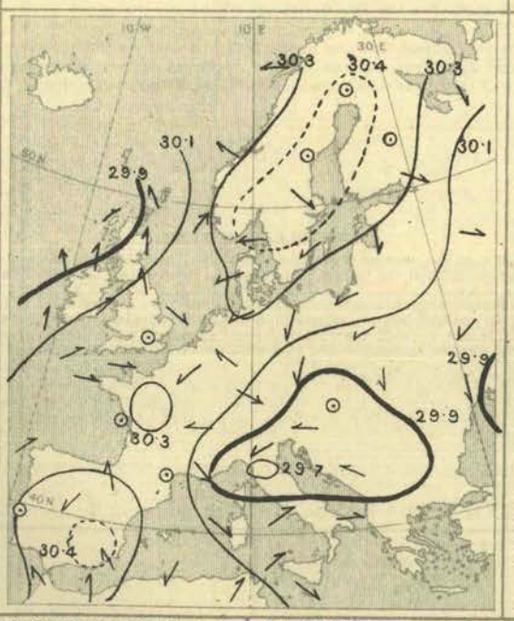
Temperature and Weather. 8 a.m.

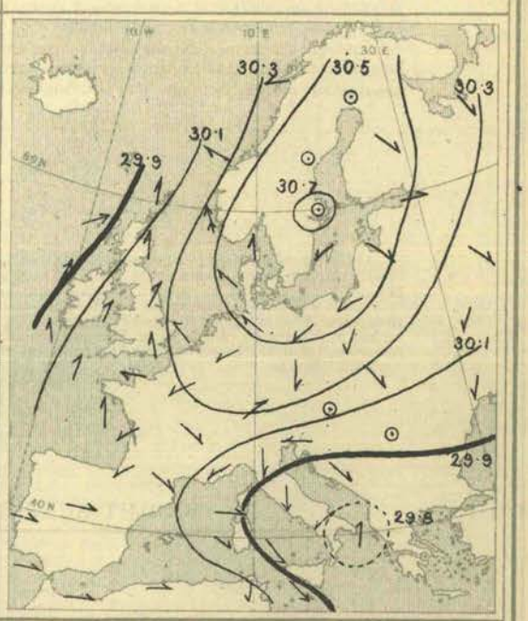


Weather cloudy or overcast over the greater part of our Islands and the Continent, with rain and mist in isolated parts of the United Kingdom, and with snow or rain in Austria and south Germany; fine and bright at most of the Danish and Russian stations, as well as in the southern parts of France, Spain, and Italy. Decided falls of rain taking place later in the west of Ireland, and smaller amounts reported in several other parts of our Islands and France. Fog and dense gloom prevailing in London during day, but clearing at night.

Temperature risen over the northern parts of the United Kingdom, fallen elsewhere, very rapidly over central Russia. Morning readings highest, 55° at Sanguinaire, 54° at Barcelona, Algiers, and Leghorn, and 52° at Cagliari; 50° at Valencia (Ireland), and above 45° in the western parts of our Islands. Lowest, – 28° Fahr. at Kuopio, – 22° at St. Petersburg, and – 18° at Haparanda; below zero over the northern parts of Sweden and Russia generally, and below 20° over Denmark and the Baltic. Rising during day to 50° or a little more on several parts of our south-western, western, and northern coasts, but remaining below 40° on the east coast of England. Exceeding 55° in the south of France, and reaching 62° at Perpignan.

Barometer and Wind. 8 a.m. and 6 p.m.





Wind light to fresh from the Southward or South-Westward in the west and north of our Islands, but Westerly in the south and south-east of England. Northerly or North-Easterly over the greater part of Russia, Poland, eastern Germany, and the Baltic, and Easterly over Denmark, the Netherlands, and the west of Norway, but North-Westerly or Westerly over the west and south of Germany. Strong from the North-Westward in the south of France, a Westerly gale at Leghorn, light from South-West or West over the south of Italy, Easterly at Trieste and Servia. Light and variable over Spain and Algeria. No important change occurring later.

Barometer highest, 30·4 ins. and upwards over Sweden, and also over the south-east of Spain; 30·2 ins. and upwards in a broad anticyclonic band stretching in a north-easterly direction from the Peninsula across the whole of central and northern Europe to Scandinavia. Lowest, 29·5 ins. and less in a small but deep depression having its centre near Leghorn; 29·9 ins. and less in a shallow system over the south-east of Russia, and in another to the north-westward of our Islands. The northern anticyclone subsequently spreading over England, but slight fall of barometer taking place in Ireland and the west of Scotland.

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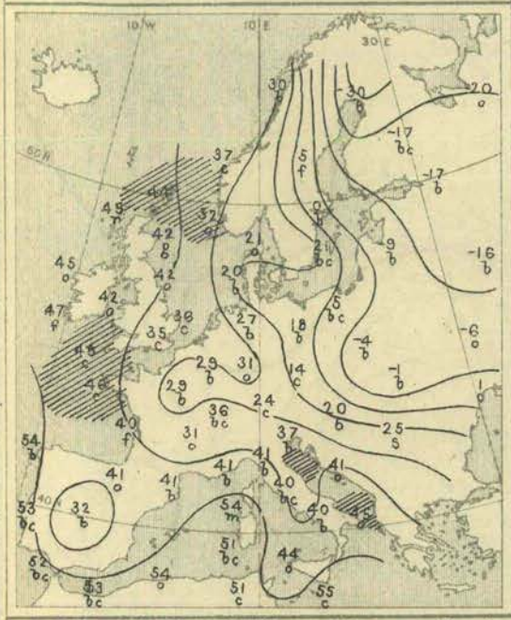
III.—SUMMARY OF WEATHER OVER EUROPE.

Saturday, 4th February.

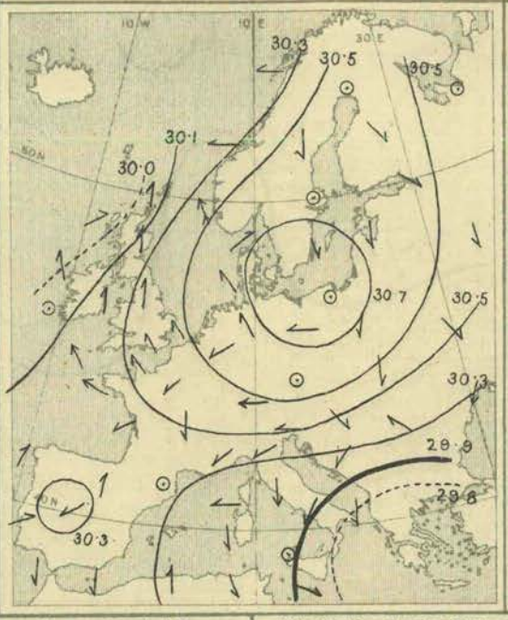
Temperature and Weather.

8 a.m.

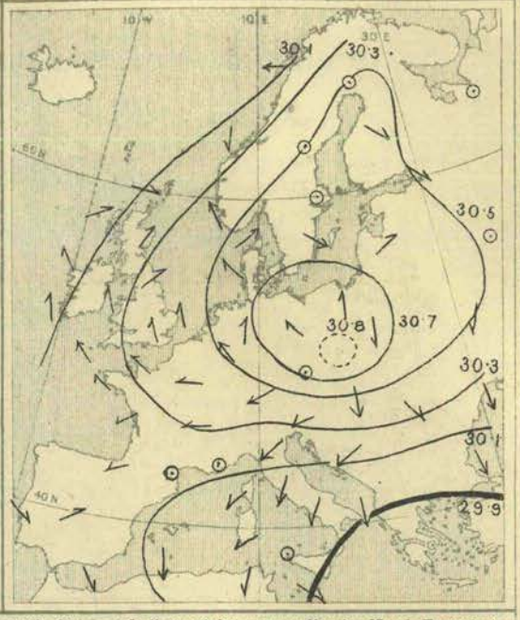


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning fine and bright, as a whole, over south-western, southern, and central Europe, with the Baltic and Gulf of Bothnia: cloudy or overcast, as a whole, elsewhere, with fog at Hernösand and Rochefort, fog and rain in Ireland, snow at Hermanstadt. Slight rain later at several of the Irish stations and at Jersey, as well as in some of the Scandinavian stations, but none elsewhere.

Temperature fallen generally—quickly over western, rapidly over central and south-eastern Europe. Morning readings exceeding 50° on the Spanish and Algerian coasts and at Malta, exceeding 45° in Ireland and at Scilly, and exceeding 35° over Great Britain generally. Below 30° to the eastward of the North Sea, and as low as − 24° Fahr. to − 10° Fahr. over the northern half of Russia, − 6° at Nicolaieff, − 4° at Warsaw, and zero to + 20° over the greater part of Germany. Exceeding 50° in the extreme west and south-west of our Islands later, exceeding 55° in the south of Italy, 60° at some other Mediterranean stations, and touching 66° at Oran and 63° at Algiers.

Wind light and anticyclonic over the Baltic and all countries surrounding it; North-Easterly to Northerly over southern Europe, Easterly in the west of France, South-Easterly to Southerly over the United Kingdom, Southerly to Easterly in Norway. A gale reported at Skudesnaes, and strong breezes at some of our western stations and at Rome. Strong South-Easterly to North-Easterly breezes felt over western Germany later, little change in our Islands.

Barometer highest, 30·7 ins. and more to 30·1 ins. in a large anticyclone covering Europe and having its central area over the Baltic and north Germany. Lowest, (1) 29·8 ins. and less in the south of Italy, and apparently still lower over Greece; (2) 30·0 ins. and less off our extreme north-western coasts. Anticyclone moving south-eastwards later, but increasing in intensity and spreading westwards towards the British Islands.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force is indicated thus: ⟫⟶ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze: and ⊙ = a calm. In the left-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain: h = hail: s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Germany, Sweden, and Norway, and 7 a.m. in France, Algeria, Italy, Austria, and Russia; that for 6 p.m. is prepared from observations made at 6 p.m. in the British Islands and France, 7 p.m. in Algeria, 8 p.m. in Sweden and Norway, Germany, and Austria, and 9 p.m. in Russia, Belgium, and Italy. The time indicated in each case is the standard time for each country.

GENERAL NOTES.

At the commencement of this week the contrast between the weather prevailing over western and that over eastern Europe was very striking. In the former districts cyclonic breezes from between South and West were prevalent, and the morning temperatures ranged from between 48° and 56° on the Atlantic coasts of Europe, to between 32° and 36° as far east as western Germany and the Norwegian coast; in the latter the readings were as low as 0° to − 18° Fahr., while over central Europe they ranged between + 4° and 19°. During the next few days the higher temperatures were pushed eastwards over a great deal of Germany and Austria, and on Thursday the readings were above 32° over the whole of central Europe. On Wednesday, however (a new high-pressure system having appeared over northern Europe), the thermometer began to fall rapidly in that region, and as the anticyclone increased in size, the cold extended both southwards and westwards until on Saturday frost again prevailed over the whole of eastern and central Europe, and was very severe at the Russian stations, and a vast anticyclone covered the whole of Europe—its central area covering the German and Austrian Empires.

BRIGHT SUNSHINE Values for the Week in addition to those found on page 26.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	15·3	?	26	?	EASTBOURNE	14·5	?	23	?
OSWALDKIRK (Yorkshire)	11·5	?	19	?	TENBY	22·3*	?	36*	?
WORKSOP	11·6	+ 0·6	19	+ 2	NEWQUAY	11·0	?	17	?
THURCASTON (Leicestershire)	11·2	+ 1·3	18	+ 2	TORQUAY	13·1*	?	21*	?
MARGATE	11·1	?	18	?	ARLEY COTTAGE (County Cavan)	11·2	?	18	?
WESTBOURNE (Sussex)	11·3*	?	18*	?	GUERNSEY	14·3*	?	22*	?
BRIGHTON	13·7	?	22	?					

The values at Westbourne, Tenby, Torquay, and Guernsey are obtained by Jordan's Photographic Recorder.

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WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; R. H. SCOTT, F.R.S., SECRETARY.
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VOL. X. No. 6.] *Third Series.* WEEK ENDING SATURDAY, 11TH FEBRUARY, 1893. [*Price 6d.* [*Annual subscription post paid*, £1 10*s.* 0*d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871–90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty-five years 1866–90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90, only. BRIGHT SUNSHINE.—*The Mean values* employed are those for the corresponding periods in the ten years 1881–90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

DISTRICTS. (See p. 32.)	Observed during the Week. Highest.	Observed during the Week. Lowest.	Averages of Daily Maxima.	Averages of Daily Minima.	Averages of Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 1st, 1893. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
	°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts. 0. SCOTLAND, NORTH	54	30	45·3	36·3	40·9	3 above.	9	+ 4	23	−11	43	+ 3	240	+ 41
1. SCOTLAND, EAST	52	29	45·6	35·4	40·5	3 above.	10	+ 1	26	−10	39	− 9	262	+ 31
2. ENGLAND, N.E.	51	25	45·3	34·7	40·0	1 above.	9	0	28	− 4	33	− 9	242	+ 29
3. ENGLAND, EAST	55	21	46·7	32·7	39·7	1 above.	13	+ 3	36	0	36	− 10	314	+ 72
4. MIDLAND COUNTIES	54	23	47·2	34·9	41·0	2 above.	15	+ 4	28	− 7	56	− 1	279	+ 42
5. ENGLAND, SOUTH	54	20	47·6	35·7	41·7	2 above.	16	+ 3	26	− 1	51	− 17	257	+ 77
Principal Grazing, &c., Districts. 6. SCOTLAND, WEST	50	31	46·4	38·6	42·5	3 above.	18	+ 9	10	−15	70	+ 12	178	+ 11
7. ENGLAND, N.W.	52	28	46·3	37·5	41·9	2 above.	12	+ 2	19	− 7	57	+ 5	194	+ 22
8. ENGLAND, S.W.	54	26	48·4	39·0	43·7	2 above.	25	+ 8	8	−12	89	− 5	160	+ 34
9. IRELAND, NORTH	53	32	48·3	39·4	43·9	3 above.	24	+10	7	−16	91	+ 11	127	− 22
10. IRELAND, SOUTH	56	36	49·9	41·5	45·8	3 above.	29	+ 8	1	−17	124	+ 3	97	− 16
— CHANNEL ISLANDS	53	34	49·8	42·7	46·3	2 above.	30	+ 8	0	− 2	133	+ 5	68	+ 14

Rainfall.

DISTRICTS. (See p. 32.)	For the Week. Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 1st, 1893. Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.
		10ths of In.	10ths of In.			Ins.	Ins.
Principal Wheat-producing Districts. 0. SCOTLAND, NORTH	6	24	12 more.	34	+ 3	7·5	+ 0·1
1. SCOTLAND, EAST	5	9	3 more.	29	+ 6	3·1	− 0·7
2. ENGLAND, N.E.	3	2	2 less.	23	+ 2	1·9	− 0·7
3. ENGLAND, EAST	4	3	1 less.	29	+ 7	2·6	− 0·1
4. MIDLAND COUNTIES	5	4	1 less.	27	+ 5	2·6	− 0·6
5. ENGLAND, SOUTH	5	5	1 less.	26	+ 4	2·8	− 0·8
Principal Grazing, &c., Districts. 6. SCOTLAND, WEST	7	21	9 more.	30	+ 2	4·9	− 2·9
7. ENGLAND, N.W.	5	9	3 more.	26	+ 1	2·9	− 1·3
8. ENGLAND, S.W.	6	11	3 more.	26	0	4·2	− 1·4
9. IRELAND, NORTH	6	13	6 more.	32	+ 4	4·5	− 0·2
10. IRELAND, SOUTH	7	9	0 (average)	29	+ 2	5·3	− 0·3
— CHANNEL ISLANDS	6	6	1 less.	30	+ 2	3·7	− 0·9

Bright Sunshine.

DISTRICTS. (See p. 32.)	For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 1st, 1893. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
Principal Wheat-producing Districts. 0. SCOTLAND, NORTH	7	+ 1	12	+ 2	42	0	13	0
1. SCOTLAND, EAST	16	+ 1	26	+ 3	56	−21	17	− 7
2. ENGLAND, N.E.	20	+10	32	+14	62	+ 7	18	+ 2
3. ENGLAND, EAST	25	+10	38	+15	69	− 8	20	− 2
4. MIDLAND COUNTIES	23	+10	35	+14	71	+ 6	20	+ 2
5. ENGLAND, SOUTH	21	+ 7	32	+10	63	0	17	0
Principal Grazing, &c., Districts. 6. SCOTLAND, WEST	16	+ 3	26	+ 7	68	+12	20	+ 3
7. ENGLAND, N.W.	13	+ 2	20	+ 3	51	− 7	15	− 2
8. ENGLAND, S.W.	21	+ 4	32	+ 6	90	+15	25	+ 4
9. IRELAND, NORTH	14	+ 1	22	+ 3	56	−10	16	− 3
10. IRELAND, SOUTH	17	+ 1	26	+ 2	65	−16	19	− 4
— CHANNEL ISLANDS	23	+ 4	35	+ 6	79	−22	21	− 6

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather, after being fair and colder than of late during the first day or two, became mild and unsettled, with frequent and rather heavy falls of rain in the western and northern districts and slight falls in the east. A good many intervals of fine, bright weather were experienced, however, in almost all parts of the Kingdom.

Temperature was again above the mean, the excess ranging from 1° in England E. and N.E., to 3° in Ireland and Scotland. The highest of the maxima were recorded either on the 7th or 10th, when they varied from 56° in England S. and 55° in England E., to 51° in England N.E. and 50° in Scotland W. The lowest of the minima were registered on the 6th, and ranged from 20° in England S. and 21° in England E. to 31° in Scotland W., 32° in Ireland N., 34° in the Channel Islands, and 36° in Ireland S.

Rainfall was greatly in excess of the mean in Scotland N. and W., and to a less extent in Scotland E., Ireland N., and in the western parts of England. Over eastern, central, and southern England, and in the Channel Islands, the fall was a little less than the normal, while in Ireland S. it just equalled it. In isolated localities in the north of England some large amounts were recorded—thus at Aysgarth (Yorkshire) as much as 2 ins. fell between the 7th and 10th.

Bright Sunshine exceeded the mean in all districts, the percentage of the possible duration ranging from between 32 and 38 in most parts of England to 22 in Ireland N. and England N.W., and to 12 in Scotland N.

Barometer and Wind.—At the commencement of the week a large area of high-pressure extended from the eastward over the greater part of the United Kingdom, and the winds were moderate from the Southward. This system soon gave way, however, and depressions appeared off our north-western coasts, causing increasing winds from the South-Westward and Westward. Towards the end of the period some deep and important disturbances passed eastwards over our extreme northern coasts, bringing fresh or strong South-Westerly to Westerly gales to all parts of the Kingdom.

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II.—DATA from which the SUMMARY on page 31 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°				Inches	Inches.				
0. SCOTLAND, N.	Sumburgh Head ℌ	48	32	43·1	36·6	39·9	+ 1·0	3	20	7	0·89	+0·07	*	*	*	*
	Stornoway ℌ	49	34	45·7	36·3	41·0	+ 1·8	10	23	7	1·42	+0·39	13·8	+ 1·1	23	+ 2
	Wick ℌ	47	32	43·4	36·3	39·9	+ 1·9	4	21	5	0·71	+0·21	*	*	*	*
	Lairg ℌ	49	30	45·0	34·3	39·7	+ 3·2	8	29	6	1·25	+0·49	*	*	*	*
	Glencarron ℌ	54	31	46·9	35·3	41·1	+ 3·6	14	27	6	4·54	+2·67	*	*	*	*
	Fort Augustus ℌ	50	32	46·8	37·0	41·9	+ 3·1	13	21	6	3·43	+2·45	2·8	?		?
	Fort William ℌ	50	35	46·4	38·6	42·5	+ 3·3	18	10	7	4·28	+2·18	5·2	?	9	?
1. SCOTLAND, E.	Nairn ℌ	50	33	46·4	35·3	40·9	+ 2·7	12	27	5	1·22	+0·82	*	*	*	*
	Aberdeen ℌ	49	34	45·0	36·1	40·6	+ 2·3	8	23	4	0·35	−0·22	17·0	+ 1·2	28	+ 3
	Braemar ℌ	45	31	41·6	34·2	37·9	+ 2·7	0	29	6	1·45	+0·70	9·5†	?†	16†	?†
	Ochtertyre ℌ	50	29	46·3	34·7	40·5	+ 3·5	12	29	6	1·01	+0·01	*	*	*	*
	Leith ℌ	52	34	48·9	37·3	43·1	+ 3·2	27	13	5	0·48	+0·19	*	*	*	*
	Marchmont ℌ	48	31	45·4	34·6	40·0	+ 2·5	10	28	4	0·98	+0·39	18·5	?	30	?
2. ENGLAND, N.E.	Alnwick Castle	49	30	? 46·1	36·1	? 41·1	?+ 2·8	? 11	? 24	4	0·46	−0·04	*	*	*	*
	Durham	50	25	44·6	33·6	39·1	+ 1·1	7	31	4	0·19	−0·21	22·8	+ 9·0	36	+15
	Shields	51	29	46·0	34·4	40·2	+ 0·7	11	29	3	0·40	+0·02	*	*	*	*
	Scarborough ℌ												*	*	*	*
	York ℌ	51	27	46·0	34·9	40·5	+ 1·6	11	28	3	0·10	−0·34	20·6	+ 9·3	32	+15
	Spurn Head	47	28	43·7	34·6	39·2	+ 0·3	5	27	1	0·04	−0·30	*	*	*	*
3. ENGLAND, E.	Hillington ℌ	51	25	45·0	33·3	39·2	+ 0·7	8	33	2	0·31	−0·13	24·0	+ 9·7	37	+15
	Yarmouth	50	27	45·1	33·3	39·2	+ 0·7	9	33	3	0·17	−0·29	*	*	*	*
	Geldeston	54	25	47·3	33·3	40·3	+ 1·1	15	34	4	0·39	+0·01	26·6	+10·9	41	+17
	Cambridge	55	21	49·3	31·3	40·3	+ 1·4	20	43	4	0·28	−0·11	23·6	+ 8·9	36	+14
	Rothamsted	53	21	46·9	32·5	39·7	+ 1·5	14	37	6	0·46	−0·10	24·8	?	38	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	52	26	46·9	36·3	41·6	+ 2·6	14	23	2	0·17	−0·23	*	*	*	*
	Loughborough	53	26	47·7	34·6	41·2	+ 2·1	16	30	4	0·42	−0·06	*	*	*	*
	Stamford (Ketton Hall)	53	24	47·9	34·3	41·1	+ 1·8	17	31	4	0·22	−0·40	*	*	*	*
	Cheadle ℌ	51	27	44·7	34·2	39·5	+ 2·1	8	30	6	0·67	+0·08	*	*	*	*
	Churchstoke ℌ	52	28	46·7	35·6	41·2	+ 2·3	13	26	6	0·93	+0·29	24·8	+11·0	38	+16
	Hereford ℌ	54	28	48·0	35·5	41·8	+ 1·9	17	27	5	0·30	−0·24	*	*	*	*
	Cirencester	52	23	47·6	33·0	40·3	+ 1·6	16	35	5	0·34	−0·31	18·9	+ 3·7	29	+ 6
	Oxford	52	27	48·1	35·6	41·9	+ 1·9	17	27	5	0·24	−0·26	26·0	+12·5	40	+20
5. ENGLAND, S.	London	53	24	48·7	33·3	41·0	+ 1·0	19	35	5	0·31	−0·13	15·1†	+ 6·1†	23‡	+10†
	North Foreland	53	30	46·6	35·3	41·0	+ 1·0	13	27	4	0·21	?	*	*	*	*
	Strathfield Turgiss ℌ	53	29	47·7	32·2	40·0	+ 0·5	16	39	6	0·47	−0·05	*	*	*	*
	Dungeness	53	32	46·4	36·9	41·7	+ 1·7	12	21	4	0·31	−0·21	*	*	*	*
	Hastings (St. Leonards)	54	33	48·0	36·3	42·2	+ 1·8	25	16	3	0·48	−0·07	22·1	+ 4·1	33	+ 7
	Southampton	52	28	48·2	36·6	42·4	+ 1·6	25	15	5	0·43	−0·22	25·5	+ 8·5	36	+14
	Hurst Castle	51	30	47·1	38·3	42·7	+ 1·7	20	10	6	0·63	+0·03	*	*	*	*
	Stowell ℌ	52	29	47·8	36·5	42·2	+ 3·2	25	15	7	0·89	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	50	31	48·2	37·9	43·1	+ 2·3	25	11	7	4·43	+2·55	*	*	*	*
	Glasgow	48	37	45·7	38·6	42·2	+ 3·2	16	10	6	1·38	+0·48	17·2	+ 6·9	28	+13
	Ardrossan	48	38	46·1	39·1	42·6	+ 2·2	16	8	6	1·19	+0·34	*	*	*	*
	Glenlee ℌ	49	34	45·0	37·0	41·0	+ 3·0	8	20	7	2·47	+1·07	*	*	*	*
	Douglas (Isle of Man)	49	37	47·2	40·2	43·7	+ 3·0	19	5	7	0·96	+0·04	15·3	+ 0·4	24	+ 1
7. ENGLAND, N.W.	Newton Reigny	47	28	44·3	35·0	39·7	+ 2·5	6	26	6	2·05	+1·28	13·8	+ 1·1	22	+ 3
	Stonyhurst	47	29	44·9	36·9	40·9	+ 2·0	8	20	6	1·49	+0·63	10·2	− 2·8	16	− 4
	Blackpool ℌ	47	32	44·7	37·4	41·1	+ 1·9	8	18	6	0·52	−0·08	15·6	+ 2·3	24	+ 4
	Manchester	52	31	46·2	36·3	41·3	+ 2·5	12	23	6	1·39	+0·85	3·8†	?†	6†	?†
	Liverpool Obsy. (Bidston)	51	32	47·4	37·1	42·3	+ 2·0	23	14	4	0·44	+0.01	*	*	*	*
	Llandudno ℌ	52	33	49·2	38·4	45·3	+ 2·0	28	10	5	0·25	−0·21	19·2	+ 4·9	30	+ 7
	Holyhead	50	39	47·1	41·3	44·2	+ 2·2	18	2	4	0·36	−0·30	*	*	*	*
8. ENGLAND, S.W.	Llandovery	53	27	48·9	33·9	41·4	+ 0·1	19	33	6	2·03	+0·95	*	*	*	*
	Pembroke	49	36	47·6	40·7	44·2	+ 1·8	21	4	7	0·64	−0·08	21·5	+ 4·5	23	+ 8
	Arlington (N. Devon)	50	33	46·3	37·8	42·0	+ 2·0	12	12	6	1·92	+0·92	*	*	*	*
	Cullompton ℌ	54	26	49·3	37·4	43·4	+ 2·9	29	13	6	1·06	+0·34	18·8	+ 4·8	28	+ 8
	Falmouth	53	40	49·7	42·7	46·2	+ 2·2	29	0	7	0·73	−0·36	24·2	+ 6·4	36	+11
	Plymouth	54	35	49·1	40·2	44·7	+ 2·0	26	5	6	0·75	−0·03	15·1	− 1·0	23	− 1
	Prawle Point	51	38	48·1	40·4	44·3	+ 2·2	23	4	6	0·86	+0·28	*	*	*	*
9. IRELAND, N.	Malin Head	50	38	46·9	41·0	44·0	+ 2·0	18	3	6	0·84	?	*	*	*	*
	Londonderry	52	36	48·9	39·9	44·4	+ 3·5	26	6	7	1·54	+0·75	*	*	*	*
	Edenfel (Omagh)	50	35	47·0	39·1	43·1	+ 3·3	20	8	6	1·35	+0·69	*	*	*	*
	Mullaghmore	53	36	48·9	40·0	44·5	+ 2·0	26	6	6	1·11	+0·31	*	*	*	*
	Belmullet	52	33	48·9	40·0	44·5	+ 2·3	26	6	7	2·12	?	*	*	*	*
	Markree Castle	51	33	48·9	38·0	43·5	+ 3·2	27	11	7	1·39	+0·69	13·1	− 0·7	20	− 1
	Brookeborough	51	33	48·7	38·0	43·4	+ 4·0	27	11	6	2·58	+1·76	*	*	*	*
	Armagh	51	34	48·8	38·1	43·5	+ 3·7	27	11	7	0·64	+0·04	18·1	+ 4·3	28	+ 7
	Donaghadee	51	37	47·4	40·7	44·1	+ 3·1	20	4	7	0·60	−0·01	*	*	*	*
	Edgeworthstown	?	32	?	37·9	?	?	?	?	5	0·87	+0·17	*	*	*	*
10. IRELAND, S.	Dublin	54	36	50·9	41·0	46·0	+ 3·8	32	3	6	0·76	+0·25	18·4	+ 2·8	28	+ 4
	Parsonstown	53	36	48·9	40·0	44·5	+ 3·5	26	6	7	0·81	+0·22	15·3	0·0	24	0
	Kilkenny	52	37	48·6	40·7	44·7	+ 2·7	24	4	7	0·68	−0·02	*	*	*	*
	Waterford	52	37	49·1	41·5	45·3	+ 2·1	25	1	7	0·42	−0·35	*	*	*	*
	Roche's Point	52	39	49·3	42·6	46·0	+ 2·1	28	0	7	1·01	−0·17	*	*	*	*
	Valencia	54	42	51·0	45·0	48·0	+ 3·0	42	0	7	0·57	−0·74	16·1	− 0·7	25	− 1
	Killarney	56	36	51·4	40·9	46·2	+ 2·0	34	3	7	1·50	?	*	*	*	*
	Foynes	55	36	50·2	40·5	45·4	+ 2·4	30	4	6	1·37	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	53	43	50·6	45·1	47·9	+ 2·0	41	0	7	0·41	−0·33	*	*	*	*
	Jersey	53	34	49·0	40·3	44·7	+ 1·9	26	5	5	0·87	+0·21	24·0	+ 4·0	36	+ 6

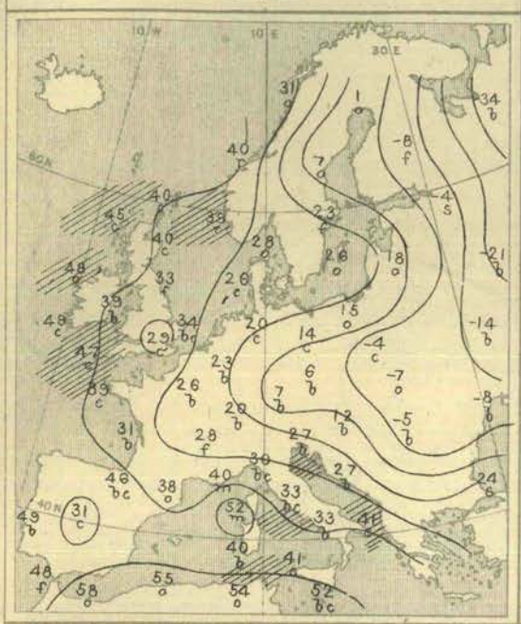
Stations marked ℌ are in connection with the Royal Meteorological Society, and those marked ℌ with the Scottish Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

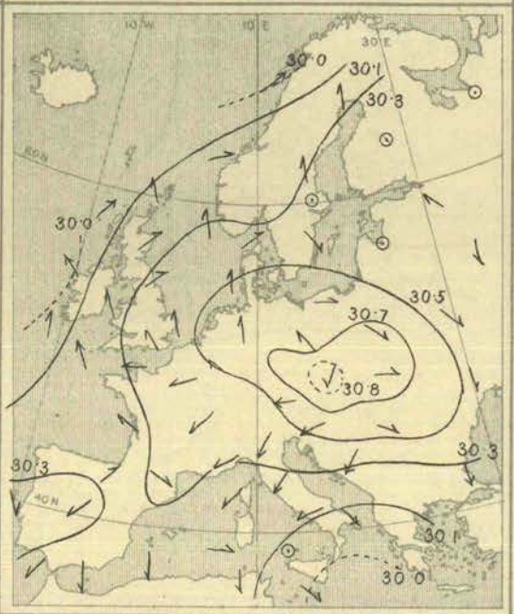
† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

Sunday, 5th February.

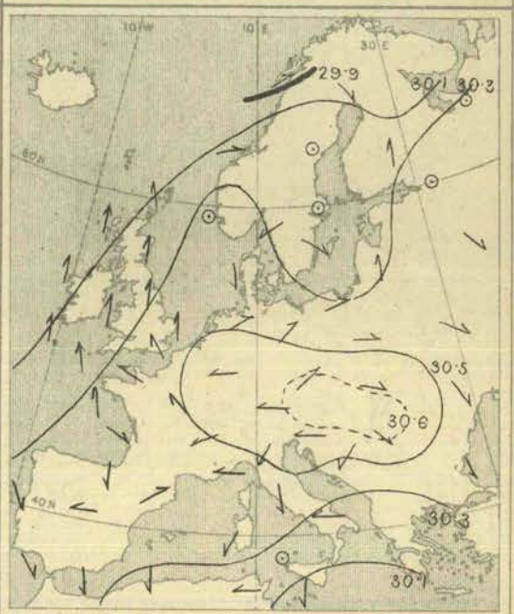
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over nearly the whole of western, central, and eastern Europe, including many parts of England and Wales; cloudy or overcast elsewhere, unsettled over the eastern parts of the Mediterranean, rain showers in Ireland, snow at St. Petersburg and at Constantinople. Snow showers in Sweden and Finland later, some rain in Ireland, the south of France, and at Constantinople, but very fine weather over England.

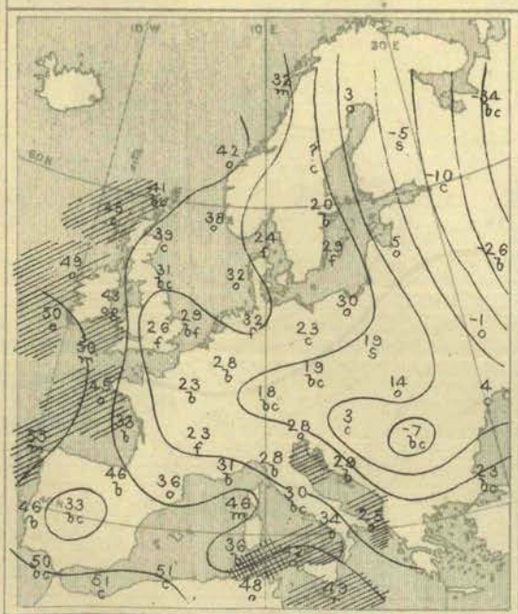
Temperature risen over Scandinavia and the Baltic, fallen elsewhere—very quickly in the south and south-east. Morning readings exceeding 50° at Malta and some of the Algerian stations, 45° to 49° in the west and south of Ireland, and above 40° on our western and northern coasts generally. Very much lower elsewhere; below 30° over our eastern counties and central France, below 10° in many parts of Germany, and as low as − 34° Fahr. at Archangel, and − 21° to − 4° over Russia generally, − 9° at Cracow, − 5° at Hermanstadt. Exceeding 50° in the west and south of Ireland, and the southern parts of France and Italy, and exceeding 60° in Algeria, but less high at the other western stations in the British Islands and France, and not touching 40° over our north-eastern and eastern counties.

Wind strong from North-East over southern Europe, moderate from South-East and East in the west and north of France, moderate to strong from South-East to South on our own north-western coasts, and moderate from South-West in the west of Norway. Anticyclonic airs prevalent over central Europe. Becoming more Southerly over the United Kingdom later, and the strong North-Easterly wind over the north of Italy increasing to a gale and spreading southward to Brindisi as a Northerly breeze.

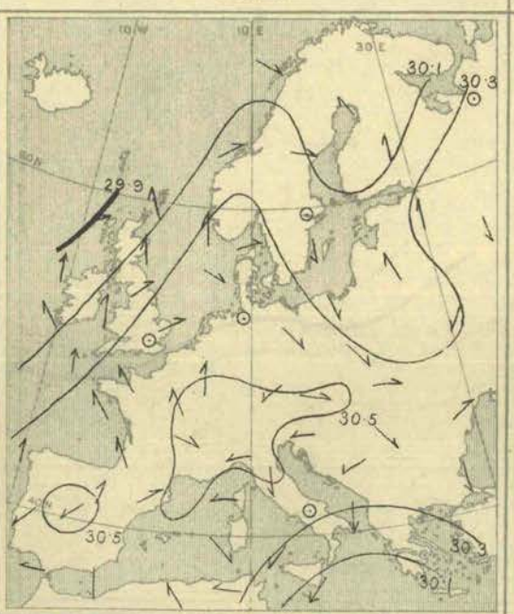
Barometer highest, 30·8 ins. and more to 30·3 ins. in a large anticyclone covering nearly the whole of Europe, and having its central area over Austria-Hungary and Poland. Lowest, about 29·6 ins. at Malta and in the extreme south of Italy on the one hand, and rather below that value off the north-west of Ireland on the other. Changing very little over the British Islands later, falling decidedly over the Baltic, rising over Italy. Anticyclone moving south-eastwards and giving way.

Monday, 6th February.

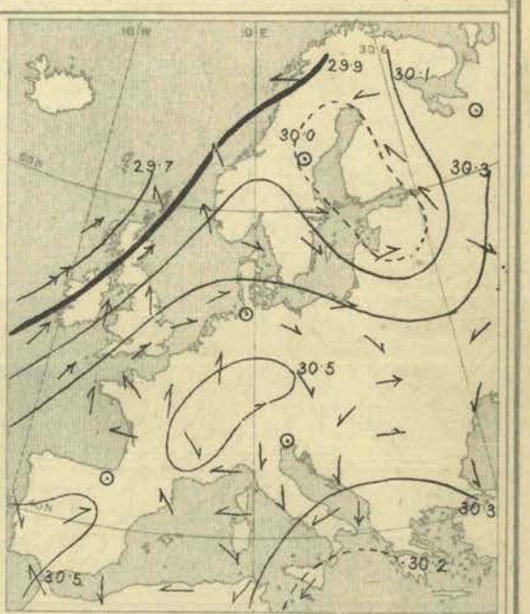
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over the Mediterranean, Spain, and France, as well as over several parts of England and in central Russia. Thick fog over our south midland counties, and sky overcast in the west, with a somewhat unsettled appearance. Slight rain later at the English and Irish stations, and in the extreme north of Scotland, snow over Finland and Poland. Aurora at Haparanda.

Temperature fallen fast over England, risen rapidly over Germany and Poland, fallen over central and southern Russia. Morning readings, 51° at Algiers and Oran, 55° at Corunna, 50° at Valencia (Ireland); exceeding 40° on the Atlantic coasts of Europe generally, much lower inland. Lowest, (1) − 34° Fahr. to − 1° over Russia, − 7° at Hermanstadt, + 3° at Buda-Pesth and Haparanda, and considerably below the freezing point over Germany and France; (2) 25° at Cambridge, 26° in London, 27° to 29° over our midland counties. Rising to above 50° over Ireland during the day, and to between 40° and 45° over the inland parts of England; to between 50° and 55° in the south of France and Italy, and to 60° and more on the Algerian coast.

Wind light and exceedingly variable over the inland parts of Europe. Southerly over the United Kingdom—very light over England, moderate to strong at the western and north-western stations, light from between North-West and West over Sweden, but from South-East over Finland. The Southerly wind in our Islands becoming stronger subsequently, and blowing a moderate to fresh gale on our west and northwest coasts. A North-Westerly breeze setting in over the Baltic.

Barometer highest, 30·5 ins. and more to 30·3 ins. in a complex anticyclone covering south-western, southern, and central Europe, and the greater part of the North Sea; 30·4 ins. and more to 30·3 ins. in another over Russia. Lowest, 30·0 ins. and less over the north-western parts of Ireland and Scotland, and over Lapland and the north of Finland, as well as over the Mediterranean, a little to the southward of Malta. A new depression approaching our west and north-west coasts later from the Atlantic and causing a rapid fall of the barometer in those regions.

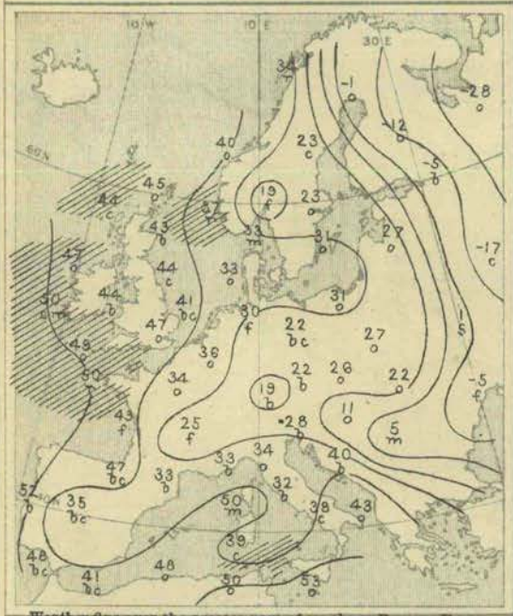
Judd & Co Ltd, Lith. 63, Carter Lane, Doctors' Commons.

III.—SUMMARY OF WEATHER OVER EUROPE.

Tuesday, 7th February.

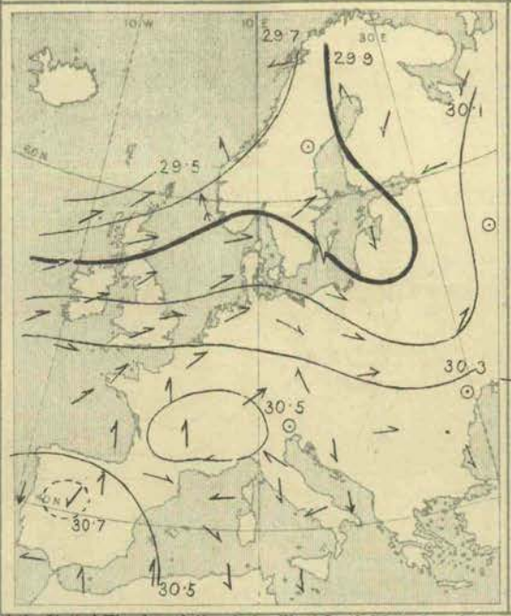
Temperature and Weather.

8 a.m.

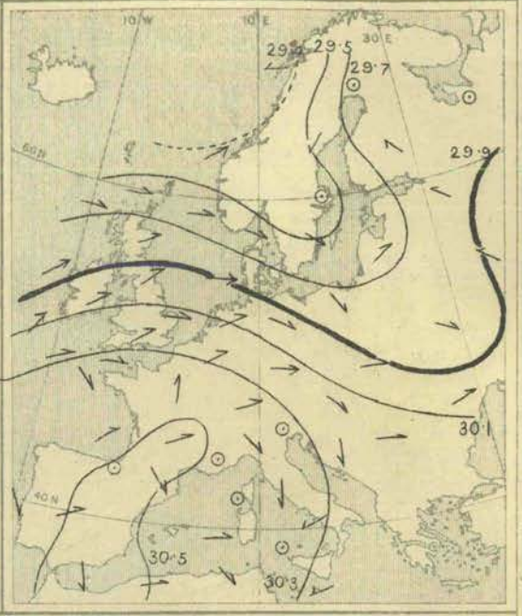


Barometer and Wind.

8 a.m.



6 p.m.



Weather fine over the greater part of southern Europe, France, and the United Kingdom, dull and rainy in the extreme south-east of England, the Channel Islands, and Norway, cloudy over the eastern and northern parts of the Continent, with snow at Hangö and Kiev. Fog reported over Holland, north Germany, and the central parts of France. Dull, rainy weather setting in later over Ireland and spreading quickly to all other parts of our Islands, and many parts of France—snow in eastern Germany and Poland. Thunder and lightning occurring at many of the Irish stations and in the west of Scotland at night.

Temperature fallen quickly in the south of Russia, and slightly in Scandinavia, risen elsewhere. Morning readings highest, 53° at Malta, 52° at Lisbon, and 50° at Barcelona, Sanguinaire, and La Calle; 50° at Valencia Island, Brest, and Lorient, and 49° at Scilly. Lowest, - 28° Fahr. at Archangel and Kharkov, — 19° at Nicolaieff, and — 17° at Moscow; below zero at many of the Russian stations, and below the freezing point over all the more central parts of the Continent. Rising during day to 50° or more at most of the English and Irish stations, and reaching 55° at Cambridge. Exceeding 55° in the south of France, and reaching 59° on the Algerian coast, and 63° at Lisbon.

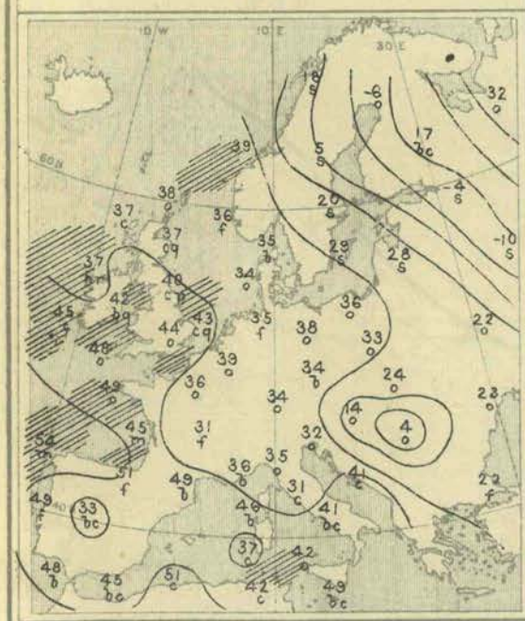
Wind South-Westerly or Westerly over our Islands, the North Sea, Denmark, Germany, and the Netherlands, light or moderate in force, as a whole, but strong in the north of Ireland; South-Easterly in the west of Norway, and blowing a gale at Skudesnaes. Light or moderate from the North-Westward or Westward over the Baltic and eastern Germany, but Easterly in Finland. Northerly in Italy, North-Easterly in Spain and the west of France, Southerly or South-Easterly in Algeria. Subsequently rising to a fresh gale from the South-Westward or Westward on several parts of our western and northern coasts, and increasing from West over Germany and the Baltic.

Barometer highest, 30·4 ins. to 30·6 ins. in an anticyclone lying over the greater part of central and southern Europe. Lowest, 29·5 ins. and less in a depression lying to the northward of our Islands; gradients rather steep on our extreme north and north-west coasts. Depression subsequently travelling away to the eastward, but new disturbance approaching Ireland at night, and spreading quickly in a north-easterly direction. High-pressure over southern Europe giving way somewhat.

Wednesday, 8th February.

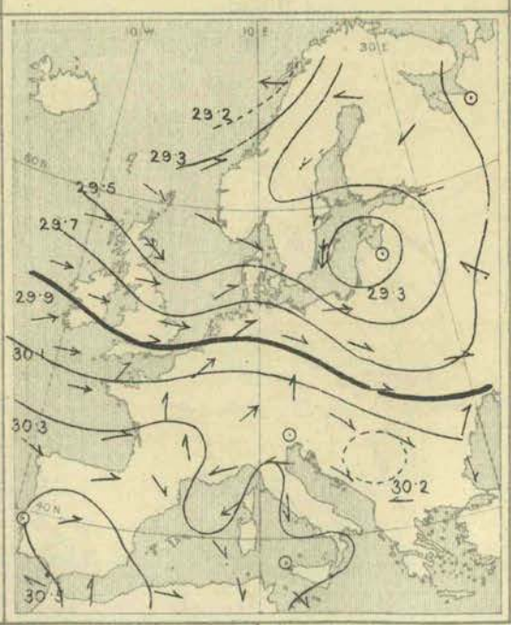
Temperature and Weather.

8 a.m.

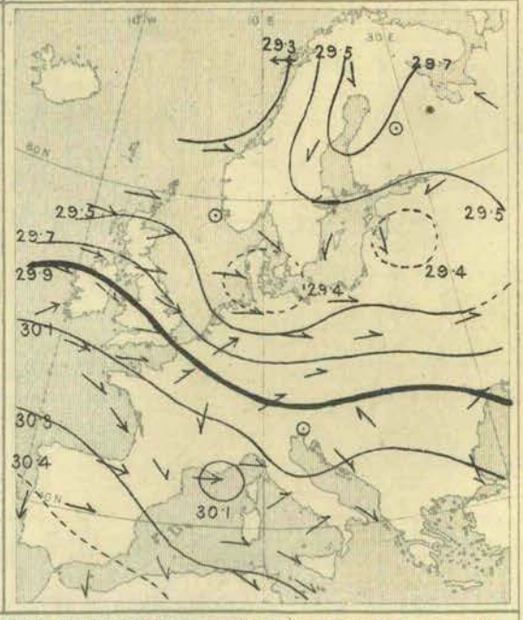


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning, though fine in many localities at time of observation, becoming very changeable and unsettled over all the northern and north-western countries of Europe, but continuing fair in the south, fine and bright on the southern and western shores of the Mediterranean. Rain and hail showers reported at several of our own stations and in the west of Norway, snow in Finmark, Sweden, and the Baltic Provinces. Rain at times during day except over the north-eastern and eastern parts of England, as well as over the Netherlands, France, and Italy, hail at Wick, Malin Head, and Valencia Island.

Temperature fallen in the north and north-west, risen decidedly over central Europe, and very rapidly over the south of Russia. Morning readings exceeding 50° at Algiers and on the north coast of Spain, exceeding 40° over our Islands generally, and exceeding 32° over central Europe. Lowest, — 32° to 0° (zero) over the north of Russia and Finland; + 4° at Hermanstadt, 14° at Buda-Pesth, and still much below the freezing point over south-eastern Europe generally. Not touching 50° at any of our own stations (excepting Cambridge) during day, but reaching 52° at Nice, 55° at Biarritz, 57° at Cagliari, and to 60° or more at Perpignan and Lisbon.

Wind (1) Westerly, fresh to a gale, over Ireland and England, North-Westerly in Scotland, South-Westerly in the Netherlands, Easterly in Finmark; (2) Westerly over Germany, Northerly in the south-east of Sweden, North-Easterly to Easterly over Finland and Lapland. Very light and variable over southern Europe and the Mediterranean. Moderating considerably on our own coasts later, but blowing a gale from North at Wisby.

Barometer highest, 30·5 ins. and more to 30·9 ins. over all the southern and western countries of Europe, including the south-western parts of the British Islands, and exceeding 29·7 ins. over the north of Finland. Lowest, 29·2 ins. and less in a depression off the north-west of Norway, 29·3 ins. and less in another over the Baltic and Gulf of Riga, and below 29·5 ins. in a "secondary" off the east of Scotland. Changing little and irregularly over our Islands later, but falling fast over Denmark.

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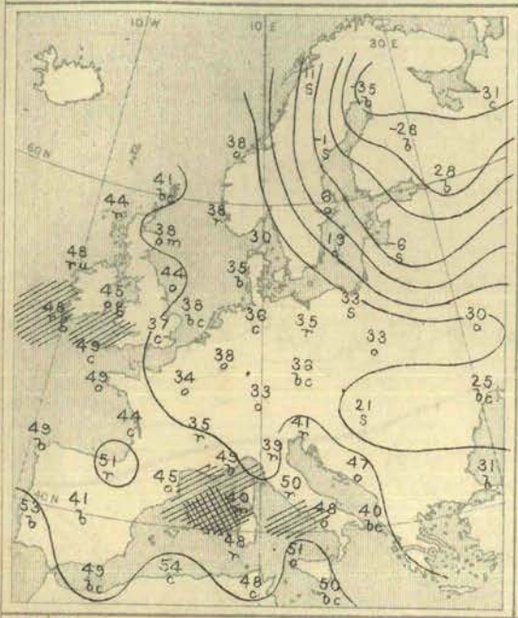
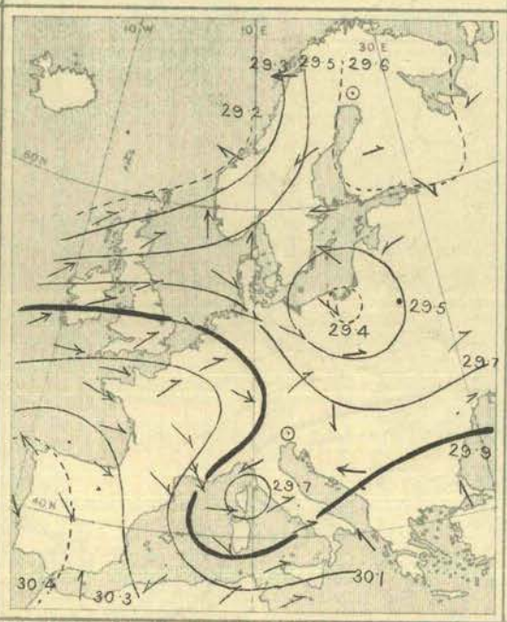
Thursday, 9th February.

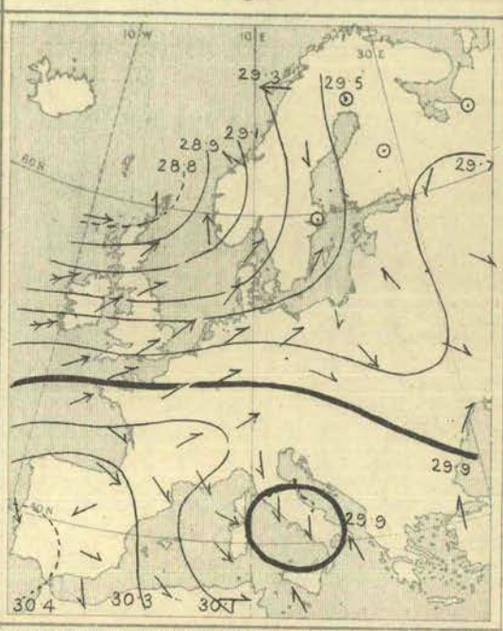
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over the greater part of south-western and south-eastern Europe, and several parts of Finland; cloudy or overcast and very unsettled elsewhere, with rain in many places, snow at Hernösand, Riga, and Neufahrwasser. Squally and showery later in nearly all districts, both of our Islands and neighbouring countries; thunder and lightning in the west and north-west of our Islands.

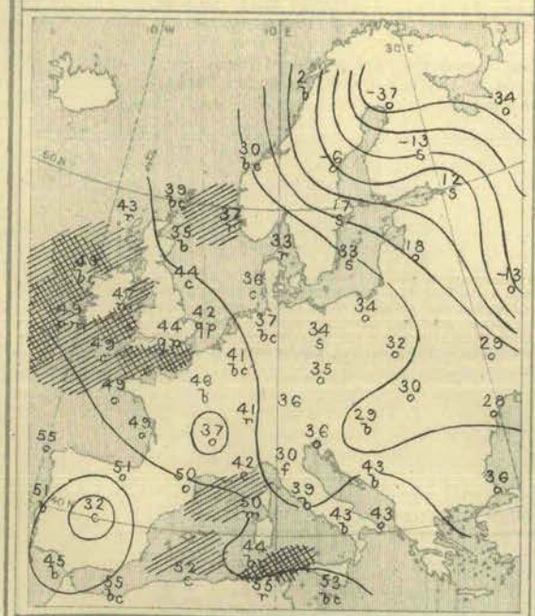
Temperature showing some further rise over south-eastern Europe generally, as well as in Scotland, but a decided fall over northern Europe. Morning readings, 50° at Malta, 51° at Palermo and Barcelona, 53° at Lisbon; lower elsewhere, but above the freezing point over France and central Europe, the North Sea, and west of Norway. Lowest, − 35° Fahr. to − 17° Fahr. over Finland and the northern parts of Russia and Sweden, − 6° at Riga, + 6° at Stockholm, 27° at Faerder. Touching 50° or 51° at some of our western and southern stations later, 52° at Biarritz, 55° and more over the southern half of Italy, 61° at Lisbon, and 66° at Nemours.

Wind very variable. North-Westerly over Spain (anticyclonic), South-Westerly over the south of Russia; variable over Finland and the north of Russia; South-Westerly and Westerly, moderate to strong, over the United Kingdom, Southerly to Easterly in Norway, Westerly over Germany, North-Easterly over the Baltic Provinces; North-Westerly to Westerly, a gale over the northern parts of the Mediterranean, South-Westerly over Italy, South-Easterly over the Adriatic. Blowing hard from West-South-West on our western and southern coasts in the evening, and gale spreading to our eastern coasts still later.

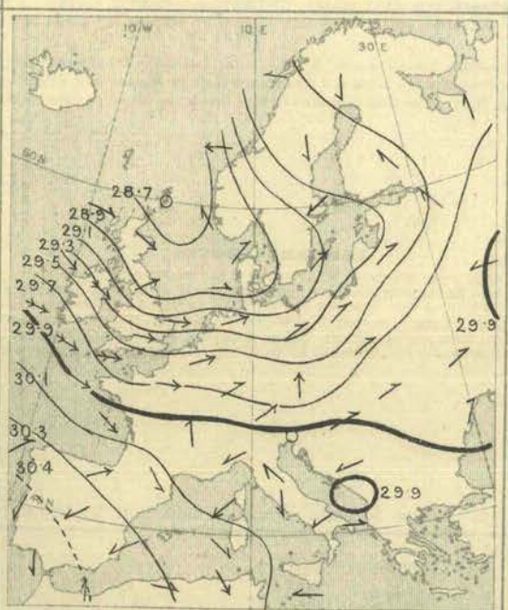
Barometer highest, 30·4 ins. and more to 30·0 ins. over Algeria, Spain, France, and the south-east of England, and 29·6 ins. and more over Finland and the Gulf of Bothnia. Lowest, 29·7 ins. and less in a depression over Corsica and the north of Italy; 29·5 ins. and less in another over north Germany and the Baltic, 29·2 ins. and less in the extreme west of Norway, and to the northward of the Shetlands. New and large depression advancing to Scotland from the westward later, and spreading all over our Islands and their neighbourhood.

Friday, 10th February.

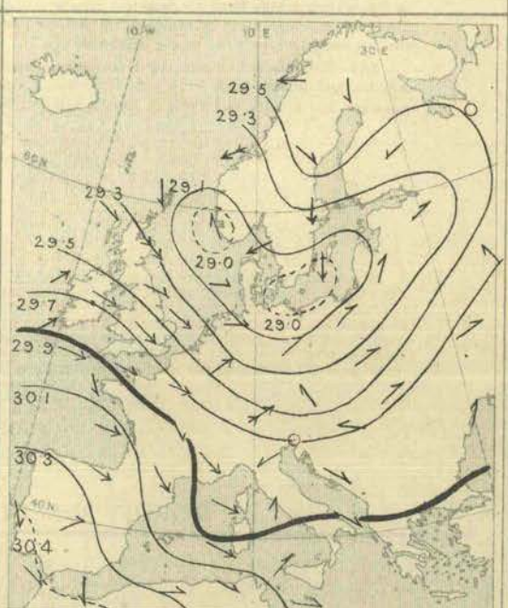
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over the southern parts of Italy and Spain, as well as in some parts of France and the north of Scandinavia, cloudy or overcast elsewhere, and very unsettled over the British Islands and their neighbourhood, rain falling in many places, snow over the Gulf of Finland and the Baltic. Squally showery weather continuing over the United Kingdom, the Netherlands, Germany, the Baltic, and Gulf of Finland during the day, but amounts of rainfall small except in the north of Scotland and at Helsingfors. Heavy rainfall at Constantinople.

Temperature changing slightly and irregularly except in the Baltic Provinces and on the shores of the Gulf of Finland, where it had risen rapidly. Morning readings exceeding 50° on the Spanish and Algerian coasts, and exceeding 40° over France, England, and Ireland. Lowest, − 37° Fahr. to − 30° over the extreme north of Europe, − 13° at Moscow, − 6° at Hernösand, + 18° at Riga, 29° at Kiev and Buda-Pesth. Rising to 50° or more in the west of our Islands later, to 57° at Nice, to nearly 60° in Italy, to 60° or more on the Spanish coasts, 63° at Perpignan and at some Algerian stations.

Wind blowing a gale from between South-West and North-West over England, Ireland, and the two Channels, and a fresh breeze from North-West in Scotland, moderate to strong from the Southward over the Baltic, and from East over Norway. Very variable over southern Europe and the Mediterranean, but Southerly and South-Westerly in the south of Russia. Severe gales from North-West over the Netherlands, and some parts of the British coasts later, and strong to fresh gales elsewhere, but wind moderating in Ireland and backing to South-West; falling light over central Europe.

Barometer highest, 30·4 ins. and more over Spain and the south-west of France, and exceeding 29·9 ins. over central Russia, and 29·5 ins. over Lapland. Lowest, 28·7 ins. and less in the Shetland Islands and their neighbourhood, 28·8 ins. and less over all the northern half of the North Sea and the east of Scotland. Depression in these latter regions moving eastwards later and filling up, and a new one forming over the Baltic. Barometer rising rapidly in Scotland, but beginning to fall again in the north-west of Ireland.

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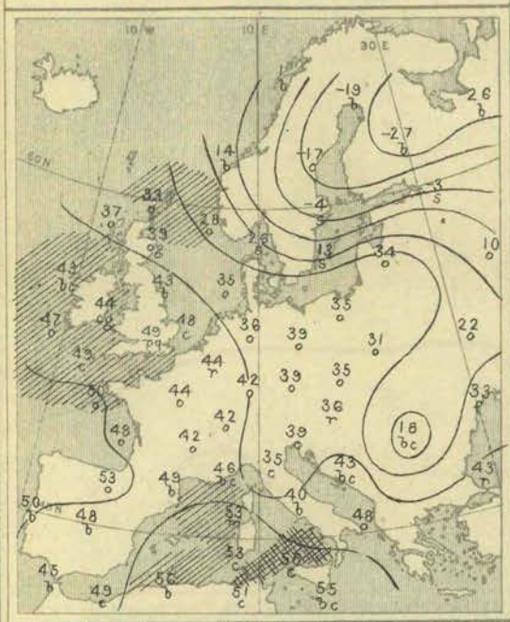
III.—SUMMARY OF WEATHER OVER EUROPE.

Saturday, 11th February.

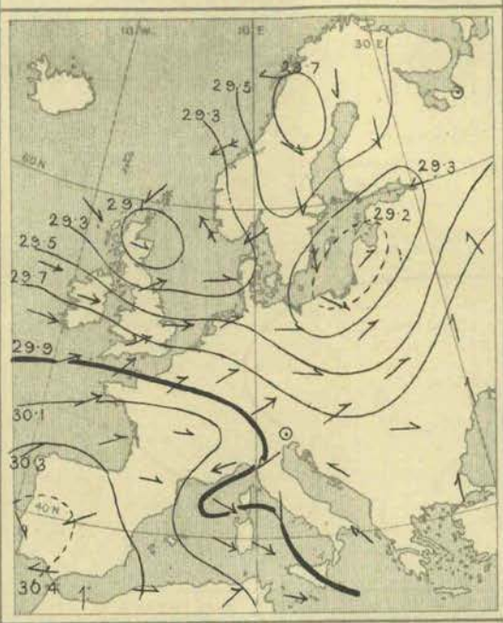
Temperature and Weather.

8 a.m.

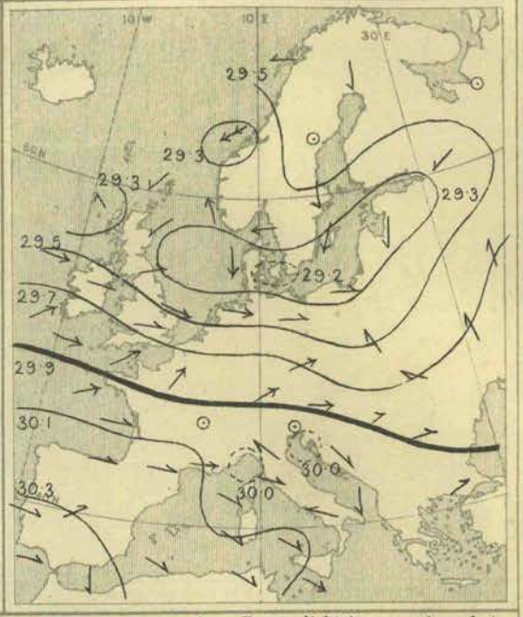


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning fine and bright over the extreme north and also the south-west of Europe, very changeable over the western, central, and eastern countries—cloudy or overcast in most places, rainy over the south-east of England, the Netherlands, and parts of Germany and Austria; snow over the Baltic and Gulf of Finland, and an angry appearance at Wick. Some cold rain (or snow) later over nearly the whole of our Islands, France, and Germany, and further falls of snow over the Baltic.

Temperature risen over Austria-Hungary and Russia, fallen over Finland and Scandinavia, and beginning to fall decidedly over Ireland and the north of Scotland. Morning readings exceeding 50° on the southern side of the Mediterranean and on the Spanish coasts, below that value over the United Kingdom and France. Very low over northern Europe, and lowest of all, – 37° Fahr. at Uleaborg, – 26° at Archangel, – 5° at Helsingfors, – 3° at St. Petersburg, + 10° at Moscow, 14° at Christiansund. Exceeding 50° over the south-east of England and north-west of France, and north of Italy later, exceeding 60° in Sicily and on the Spanish coasts, and exceeding 65° on the Algerian coasts.

Wind very variable, (1) Easterly to Northerly over northern Europe, light in many places, but strong at Stockholm, and blowing a gale at Wisby and in the west of Norway; (2) Westerly over Ireland, England, and Germany—fresh to strong in force, South-Westerly to Southerly, light, over Russia; (3) very variable over the Mediterranean, but chiefly North-Easterly over the Gulf of Genoa, North-Westerly in Corsica, Sardinia, Sicily, and Malta. Veering and backing alternately over our western districts later, but changing little, as a whole—gale in south-east of Sweden dying down.

Barometer highest, 30·4 ins. and more to 30·1 ins. over Spain and the south-western half of France, exceeding 29·8 ins. over the south-east of Russia, and exceeding 29·7 ins. over the northern parts of Scandinavia. Lowest, 29·2 ins. and less in a depression having its central area over the Baltic Provinces, and 29·1 ins. and less in another over the north-eastern half of Scotland and adjacent parts of the North Sea. Rising in the last-named regions later, changing fitfully and slightly on our western coasts.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force is indicated thus: ⟫⟶ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the left-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Germany, Sweden, and Norway, and 7 a.m. in France, Algeria, Italy, Austria, and Russia; that for 6 p.m. is prepared from observations made at 6 p.m. in the British Islands and France, 7 p.m. in Algeria, 8 p.m. in Sweden and Norway, Germany, and Austria, and 9 p.m. in Russia, Belgium, and Italy. The time indicated in each case is the standard time for each country.

GENERAL NOTES.

The change which has been in progress during this week is the reverse of that noticed in the week which preceded it. The increase in the intensity of the frost over the Continent noticed last week, and its spreading westwards to England, reached its culminating point on Monday morning, when a hard frost prevailed over our eastern and midland counties, on the western side of the anticyclone, which, at that time, covered Europe. Depressions then began to impinge on our north-western coasts, and as these increased, the European anticyclone gave way and moved southwards, so that mild Westerly and South-Westerly winds again spread gradually over the western and central countries, with the result that by Wednesday the frost had disappeared from the United Kingdom, France, and Germany. Over Russia, however, the weather was still very cold, and even on Saturday, when Westerly breezes were causing temperatures of 35° to 40° over Germany, the readings over Finland and the north of Russia were as low as – 20° to – 27° Fahr., and the wind was Easterly.

BRIGHT SUNSHINE Values for the Week in addition to those found on page 32.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	19·2	?	31	?	EASTBOURNE	22·6	?	34	?
OSWALDKIRK (Yorkshire)	17·3	?	27	?	TENBY	27·3*	?	42*	?
WORKSOP	22·8	+10·3	35	+16	NEWQUAY	24·0	?	36	?
THURCASTON (Leicestershire)	22·2	+10·8	34	+16	TORQUAY	17·6*	?	26*	?
MARGATE	23·6	?	36*	?	ARLEY COTTAGE (County Cavan)	11·8	?	18	?
WESTBOURNE (Sussex)	17·7*	?	27	?	GUERNSEY	22·3*	?	33*	?
BRIGHTON	23·1	?	35	?					

The values at Westbourne, Tenby, Torquay, and Guernsey are obtained by Jordan's Photographic Recorder.

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WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; R. H. SCOTT, F.R.S., SECRETARY.
By whom Subscriptions, payable in advance, can be received.
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VOL. X. No. 7.] *Third Series.* WEEK ENDING SATURDAY, 18TH FEBRUARY, 1893. [*Price 6d.* [*Annual subscription, post paid, £1 10s. 0d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871-90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty-five years 1866-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90, only. BRIGHT SUNSHINE.—*The Mean values* employed are those for the corresponding periods in the ten years 1881-90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

	DISTRICTS. (See p. 38.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 1st, 1893. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	53	16	42·8	31·4	37·1	1 below.	2	− 3	38	+ 4	45	+ 1	278	+ 43
	1. SCOTLAND, EAST	55	9	43·5	30·3	38·9	1 below.	4	− 5	42	+ 7	43	− 13	304	+ 34
	2. ENGLAND, N.E.	56	30	47·3	35·2	41·1	2 above.	15	+ 5	26	− 4	48	− 2	267*	+ 24
	3. ENGLAND, EAST	56	31	48·3	35·0	41·7	3 above.	18	+ 7	29	− 5	54	− 2	343	+ 66
	4. MIDLAND COUNTIES	56	29	48·2	34·7	41·5	2 above.	17	+ 4	30	− 1	73	+ 6	309	+ 39
	5. ENGLAND, SOUTH	54	31	48·9	37·5	43·2	3 above.	27	+12	13	−12	78	− 3	270	+ 63
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	53	29	44·6	35·5	40·1	0 (average)	7	− 2	25	0	77	+ 9	203	+ 9
	7. ENGLAND, N.W.	57	31	47·7	38·8	42·3	2 above.	24	+15	15	−11	81	+ 20	209	+ 12
	8. ENGLAND, S.W.	53	28	48·6	37·9	43·3	1 above.	26	+ 9	11	− 9	115	+ 5	171	+ 25
	9. IRELAND, NORTH	53	30	47·9	35·7	41·3	0 (average)	17	+ 3	23	0	108	+ 13	150	− 21
	10. IRELAND, SOUTH	58	29	49·3	36·9	43·2	0 (average)	30	+ 9	14	− 3	154	+ 11	111	− 17
	— CHANNEL ISLANDS	55	38	50·9	41·8	46·4	2 above.	32	+10	1	− 5	165	+ 16	69	+ 7

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 38.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 1st, 1893. Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 1st, 1893. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of In.	10ths of In.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	5	15	4 more.	39	+ 3	9·0	+ 0·5	19	+14	29	+21	61	+ 4	16	+ 1
	1. SCOTLAND, EAST	6	10	5 more.	35	+ 8	4·1	− 0·3	22	+15	33	+25	78	−15	20	− 4
	2. ENGLAND, N.E.	6	6	2 more.	29	+ 4	2·6*	− 0·4	13	− 1	20	− 2	75	+ 5	18	+ 1
	3. ENGLAND, EAST	6	4	0 (average)	35	+ 9	3·0	− 0·1	13	− 3	19	− 4	82	−11	20	− 2
	4. MIDLAND COUNTIES	6	7	2 more.	33	+ 7	3·3	− 0·5	11	− 4	16	− 6	82	+ 3	20	+ 1
	5. ENGLAND, SOUTH	7	8	3 more.	33	+ 7	3·6	− 0·5	13	− 4	19	− 6	76	− 2	18	0
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	6	22	12 more.	36	+ 4	7·1	− 1·8	12	− 3	18	− 3	80	+11	20	+ 3
	7. ENGLAND, N.W.	7	13	7 more.	33	+ 4	4·2	− 0·6	11	− 3	16	− 4	62	−10	15	− 2
	8. ENGLAND, S.W.	7	18	10 more.	33	+ 3	6·0	− 0·4	13	− 7	18	− 9	102	+10	24	+ 2
	9. IRELAND, NORTH	6	13	6 more.	38	+ 5	5·8	+ 0·4	19	+ 3	29	+ 7	75	− 7	18	− 2
	10. IRELAND, SOUTH	6	14	6 more.	35	+ 4	6·7	+ 0·3	19	+ 1	28	+ 2	84	−14	20	− 3
	— CHANNEL ISLANDS	7	11	4 more.	37	+ 4	4·8	− 0·5	18	− 3	26	− 3	97	−25	22	− 6

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather during this week continued very unsettled and rainy in all parts of the Kingdom. Much cloud prevailed over the country as a whole, but in Ireland and the greater part of Scotland, many bright intervals were experienced.

Temperature just equalled the mean in Ireland and in the west of Scotland; it was slightly below it in Scotland N. and E., but elsewhere it was in excess by 1° to 3°. The highest of the maxima were recorded on the 18th, when they ranged from 58° in Ireland S., and 57° in England N.W., to 53° in Scotland N. and W., England S.W., and Ireland N. The lowest of the minima were registered during the earlier part of the period, when the thermometer fell to 9° in Scotland E. (at Braemar) to 16° in Scotland N. (at Glencarron), to between 28° and 31° in most other districts, and to 38° in the Channel Islands.

Rainfall just equalled the mean in England E., but exceeded it in all other districts, the excess being very considerable in the west and north.

Bright Sunshine exceeded the normal in Ireland and the north and east of Scotland, but was deficient in all other districts. The percentage of the possible duration ranged from 18 to 33 in Scotland, from 28 to 29 in Ireland, and from 16 to 20 over England.

Barometer and Wind.—During the whole of this period, depressions travelled north-eastwards over our western and northern coasts, causing fresh or strong winds between South and West. The most important disturbance was observed on Tuesday, when the wind increased to a fresh or strong gale from South or South-West in nearly all parts of Ireland and England, and in the north-east of Scotland attained the force of a "storm" from the South-Eastward.

* This value has been altered owing to the receipt of further information.

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II.—DATA from which the SUMMARY on page 37 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°				Inches	Inches.				
0. SCOTLAND, N.	Sumburgh Head ℌ												*	*	*	*
	Stornoway ℌ	50	25	43·6	32·4	38·0	− 1·2	4	35	5	0·42	−0·56	28·9	+13·9	44	+21
	Wick ℌ	51	20	42·1	30·6	36·4	− 1·7	0	40	6	0·83	+0·31	*	*	*	*
	Lairg ℌ	50	18	41·8	29·7	35·8	− 0·9	0	43	6	1·67	+0·91	*	*	*	*
	Glencarron ℌ	50	16	41·7	29·4	35·6	− 1·9	0	45	4	2·17	+0·52	*	*	*	*
	Fort Augustus ℌ	53	18	43·9	31·8	37·9	− 0·7	5	37	6	1·36	+0·44	12·6	?	19	?
	Fort William ℌ	50	25	43·7	34·4	39·1	− 0·2	5	28	4	2·53	+0·55	16·3	?	25	?
1. SCOTLAND, E.	Nairn ℌ	54	18	43·4	28·4	35·9	− 2·6	4	49	4	0·39	+0·01	*	*	*	*
	Aberdeen ℌ	55	24	43·9	31·1	37·5	− 1·1	5	39	5	0·91	+0·31	32·7	+14·9	50	+23
	Braemar ℌ	48	9	37·8	27·4	32·6	− 2·7	0	65	5	0·95	+0·21	23·2 †	?†	36†	?†
	Ochtertyre ℌ	51	22	44·0	31·6	37·8	+ 0·4	6	38	6	2·00	+1·09	*	*	*	*
	Leith ℌ	54	28	47·6	33·3	40·5	+ 0·5	16	35	6	0·69	+0·33	*	*	*	*
	Marchmont ℌ	50	24	44·1	30·0	37·1	− 0·7	6	44	7	1·32	+0·73	15·5	?	23	?
2. ENGLAND, N.E.	Alnwick Castle ℌ	?	30	?	37·1	?	?	?	?	6	0·93	+0·41	*	*	*	*
	Durham ℌ	53	30	45·8	34·7	40·3	+ 2·1	11	29	5	0·43	+0·03	17·4	+ 1·9	26	+ 3
	Shields ℌ	55	30	45·3	34·4	41·4	+ 1·6	18	31	5	0·56	+0·17	*	*	*	*
	Scarborough ℌ	53	31	46·6	34·6	40·6	+ 0·8	13	29	6	0·66	+0·22	*	*	*	*
	York ℌ	56	34	49·7	35·4	42·6	+ 3·4	32	18	6	0·47	+0·04	9·4	− 2·9	14	− 6
	Spurn Head ℌ	52	33	46·3	35·0	40·7	+ 1·5	12	28	6	0·39	+0·05	*	*	*	*
3. ENGLAND, E.	Hillington ℌ	54	31	48·1	36·0	42·1	+ 3·1	26	17	6	0·57	+0·12	12·0	− 4·3	18	− 6
	Yarmouth ℌ	55	32	46·4	34·9	40·7	+ 2·1	12	28	5	0·16	−0·31	*	*	*	*
	Geldeston ℌ	56	33	48·9	36·8	42·9	+ 3·5	28	15	4	0·21	−0·18	16·8	− 0·5	25	0
	Cambridge ℌ	56	32	49·7	33·3	41·5	+ 2·2	22	36	6	0·52	+0·15	12·5	− 3·7	18	− 5
	Rothamsted ℌ	53	32	48·5	34·0	41·3	+ 2·6	18	33	7	0·59	+0·07	10·7	?	16	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall) ℌ	56	33	50·0	36·4	43·2	+ 3·7	32	16	4	0·40	0·00	*	*	*	*
	Loughborough ℌ	55	34	49·4	34·9	42·2	+ 2·4	31	20	6	0·70	+0·25	*	*	*	*
	Stamford (Ketton Hall) ℌ	54	30	49·3	34·1	41·7	+ 1·7	20	33	6	0·36	−0·06	*	*	*	*
	Cheadle ℌ	51	31	45·0	33·5	39·3	+ 1·3	8	32	7	0·88	+0·25	*	*	*	*
	Churchstoke ℌ	53	31	45·8	34·9	40·4	+ 1·3	14	28	7	0·73	+0·12	11·0	− 4·2	16	− 7
	Hereford ℌ	52	32	48·6	35·3	41·9	+ 1·6	18	28	6	0·83	+0·32	*	*	*	*
	Cirencester ℌ	51	29	48·0	33·0	40·5	+ 1·6	17	36	7	0·97	+0·35	10·5	− 6·9	15	−10
	Oxford ℌ	54	34	49·3	35·4	42·4	+ 2·3	31	18	7	0·51	+0·03	11·3	− 4·2	17	− 5
5. ENGLAND, S.	London ℌ	54	34	50·0	36·3	43·2	+ 2·5	32	16	7	0·37	−0·05	6·5 †	− 3·8†	10†	− 4†
	North Foreland ℌ	53	34	48·7	36·6	42·7	+ 2·2	28	15	5	0·30	?	*	*	*	*
	Strathfield Turgiss ℌ	52	32	49·3	35·2	42·3	+ 2·3	31	19	7	0·79	+0·29	*	*	*	*
	Dungeness ℌ	49	34	48·1	35·1	43·6	+ 3·3	23	8	7	0·49	0·00	*	*	*	*
	Hastings (St. Leonards) ℌ	49	33	48·0	38·5	43·3	+ 2·5	24	10	6	1·08	+0·58	13·4	− 7·1	19	− 9
	Southampton ℌ	53	34	49·6	38·1	43·9	+ 2·7	30	11	7	1·03	+0·42	14·1	− 2·9	20	− 4
	Hurst Castle ℌ	51	37	48·9	40·1	44·5	+ 3·3	25	5	7	0·92	+0·37	*	*	*	*
	Stowell ℌ	52	31	48·4	36·0	42·2	+ 2·7	27	17	7	1·18	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart) ℌ	53	29	45·5	35·0	40·3	− 0·1	10	27	7	2·90	+1·08	*	*	*	*
	Glasgow ℌ	49	31	43·6	34·9	39·3	0·0	4	26	4	1·44	+0·61	11·5	− 0·8	17	0
	Ardrossan ℌ	46	32	44·0	36·1	40·1	− 0·5	6	22	6	1·68	+0·92	*	*	*	*
	Glenlee ℌ	50	32	44·4	34·1	39·3	+ 1·0	7	30	7	2·99	+1·79	*	*	*	*
	Douglas (Isle of Man) ℌ	49	34	45·4	37·5	41·5	+ 0·6	10	18	6	2·21	+1·36	12·3	− 5·2	18	− 7
7. ENGLAND, N.W.	Newton Reigny ℌ	57	31	47·3	34·2	40·8	+ 3·3	15	31	7	1·57	+0·87	11·9	− 2·6	18	− 2
	Stonyhurst ℌ	51	32	45·5	36·0	40·8	+ 1·5	10	24	6	2·19	+1·33	10·9	− 4·4	16	− 6
	Blackpool ℌ	52	35	47·9	36·9	42·4	+ 2·6	24	14	7	1·66	+1·10	10·3	− 5·1	15	− 7
	Manchester ℌ	52	33	46·8	35·2	41·0	+ 2·0	13	27	7	1·24	+0·72	6·2 †	?†	9†	?†
	Liverpool Obsy. (Bidston) ℌ	54	34	49·4	36·4	42·9	+ 2·4	30	16	7	0·62	+0.20	*	*	*	*
	Llandudno ℌ	56	37	49·0	39·4	44·2	+ 2·9	26	7	6	0·96	+0·03	15·4	− 1·0	23	− 1
	Holyhead ℌ	49	37	47·9	39·4	43·7	+ 1·7	23	7	7	1·10	+0·47	*	*	*	*
8. ENGLAND, S.W.	Llandovery ℌ	53	28	49·9	32·4	41·2	− 0·4	22	39	7	2·20	+1·18	*	*	*	*
	Pembroke ℌ	49	38	47·7	40·6	44·2	+ 1·7	21	4	7	1·06	+0·36	15·0	− 4·3	22	− 5
	Arlington (N. Devon) ℌ	50	32	47·4	35·0	41·2	+ 1·0	15	28	7	1·98	+0·96	*	*	*	*
	Cullompton ℌ	53	32	49·5	37·0	43·3	+ 2·5	30	14	7	1·44	+0·70	11·7	− 4·5	17	− 7
	Falmouth ℌ	52	37	49·2	40·1	44·7	+ 0·6	27	5	7	1·99	+0·99	10·5	− 9·8	15	−12
	Plymouth ℌ	51	35	48·5	40·0	44·3	+ 1·3	25	6	7	2·19	+1·47	8·1	−11·0	12	−15
	Prawle Point ℌ	51	35	48·3	39·9	44·1	+ 1·6	24	6	7	1·48	+0·98	*	*	*	*
9. IRELAND, N.	Malin Head ℌ	50	35	45·9	35·7	40·8	− 1·7	11	25	6	1·09	?	*	*	*	*
	Londonderry ℌ	53	33	47·5	36·3	41·9	+ 0·7	15	24	6	1·41	+0·71	*	*	*	*
	Edenfel (Omagh) ℌ	51	30	45·1	35·1	40·1	+ 0·1	9	26	5	0·88	+0·28	*	*	*	*
	Mullaghmore ℌ	52	35	47·9	36·9	42·4	− 0·3	24	14	7	1·65	+0·89	*	*	*	*
	Belmullet ℌ	53	35	47·9	37·3	42·6	+ 0·4	24	13	6	2·39	?	*	*	*	*
	Markree Castle ℌ	53	30	47·4	35·3	41·4	+ 0·6	15	28	7	1·18	+0·48	22·1	+ 6·8	33	+11
	Brookeborough ℌ	52	31	46·6	35·1	40·9	+ 1·0	13	28	5	1·07	+0·32	*	*	*	*
	Armagh ℌ	52	31	46·9	35·3	41·1	+ 0·9	14	27	5	0·81	+0·23	16·7	+ 1·4	25	+ 3
	Donaghadee ℌ	51	30	47·1	34·1	40·6	− 0·4	14	31	7	1·04	+0·44	*	*	*	*
	Edgeworthstown ℌ												*	*	*	*
10. IRELAND, S.	Dublin ℌ	56	34	49·6	38·4	44·0	+ 1·5	29	19	5	0·26	−0·26	20·9	+ 3·6	31	+ 6
	Parsonstown ℌ	56	31	49·1	33·4	41·3	0·0	20	35	3	0·46	−0·08	22·6	+ 5·4	33	+ 8
	Kilkenny ℌ	54	29	49·3	34·6	42·0	− 0·2	20	21	6	0·90	+0·23	*	*	*	*
	Waterford ℌ	51	30	48·9	35·4	42·2	− 1·5	29	18	6	1·24	+0·36	*	*	*	*
	Roche's Point ℌ	51	35	49·1	38·4	43·8	− 0·2	28	10	6	1·22	+0·13	*	*	*	*
	Valencia ℌ	53	34	49·6	38·4	44·0	− 1·0	29	10	7	2·63	+1·42	14·1	− 4·1	21	− 7
	Killarney ℌ	55	32	49·8	36·6	43·2	− 1·3	31	15	7	3·57	?	*	*	*	*
	Foynes ℌ	58	33	49·3	40·0	44·7	+ 1·5	27	6	7	1·21	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's) ℌ	52	38	50·6	41·6	46·1	+ 0·1	30	1	7	1·17	−0·49	*	*	*	*
	Jersey ℌ	55	38	51·1	42·0	46·6	+ 3·6	32	0	7	0·95	+0·32	19·7	− 2·8	28	− 3

Stations marked ℌ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

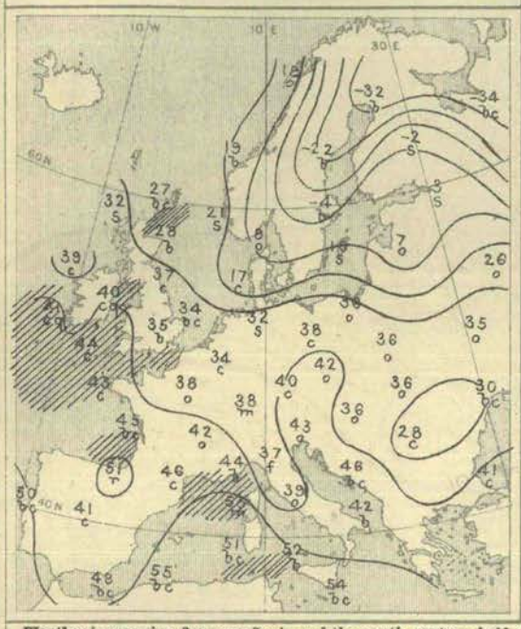
* An asterisk is inserted in all places for which the information is not usually received.

† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

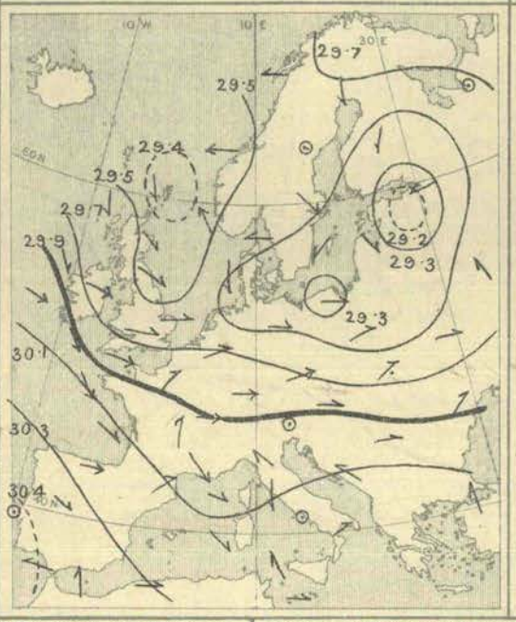
III.—SUMMARY OF WEATHER OVER EUROPE.

Sunday, 12th February.

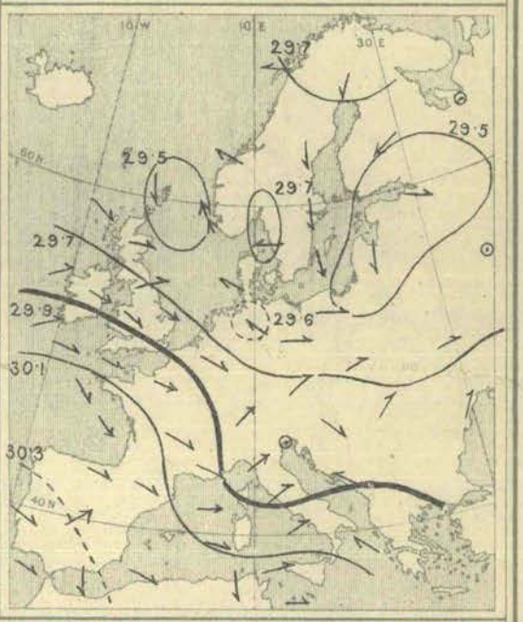
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine over Spain and the south-western half of France, but very changeable and unsettled in all other parts of Europe—sky cloudy or overcast in most places, temporarily clear at others, with rain locally over the central and western countries, hail in the north-west, snow in the north. Showers of snow, hail, or cold rain in nearly all parts of western Europe later, but with bright intervals in most places. Snow in many parts of Russia.

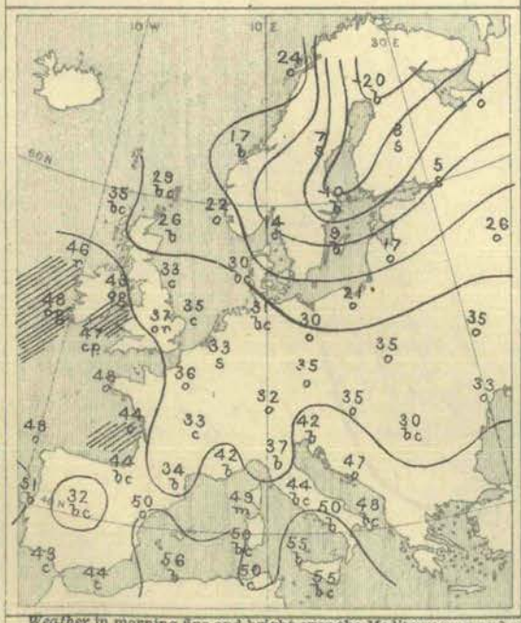
Temperature fallen over the British Islands and western Europe, risen over the central and northern countries. Morning readings exceeding 50° at a few of the Mediterranean and Spanish stations only, below 40° over Scotland, England, and central Europe, and as low as − 34° at Archangel, − 32° at Haparanda, − 22° at Hernösand, − 4° at Wisby, + 8° at the Scaw, 27° at Wick, 28° at Aberdeen. Failing to reach 50° over Ireland or England later, but touching 52° at Brest, 63° at Nice, 60° or more at Perpignan, as well as on the Spanish and Algerian coasts, and in the south of Italy, and 70° at Laghouat.

Wind light Northerly to North-Westerly in Scotland, fresh to strong from North-West at our western and southern stations, and over the Bay of Biscay; moderate Northerly over Germany, variable and light over Russia, North-Easterly over Finland and the Baltic, Easterly to South-Easterly in Norway, moderating on the English coasts generally during the day, and backing to South-West in the west of Ireland. Westerly wind falling light over north Germany and becoming variable; North-Easterly wind over northern Europe also falling light.

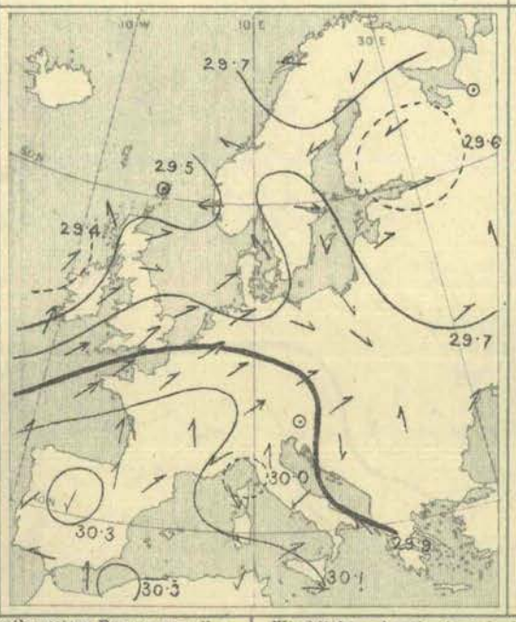
Barometer highest, 30·4 ins. to 30·0 ins. over south-western and south-eastern Europe, the Bay of Biscay, and the Mediterranean, and 29·6 ins. and more over Sweden, Finland, and the White Sea. Lowest, 29·2 ins. to 29·4 ins. in a complex depression lying over the Baltic Provinces and north Germany; 29·4 ins. and less in another system lying between the Shetlands and Norway, and below 29·5 ins. in a "V" shaped secondary stretching southwards over the North Sea. The latter disturbances filling up later, but a new system approaching our north-west coasts from the Atlantic.

Monday, 13th February.

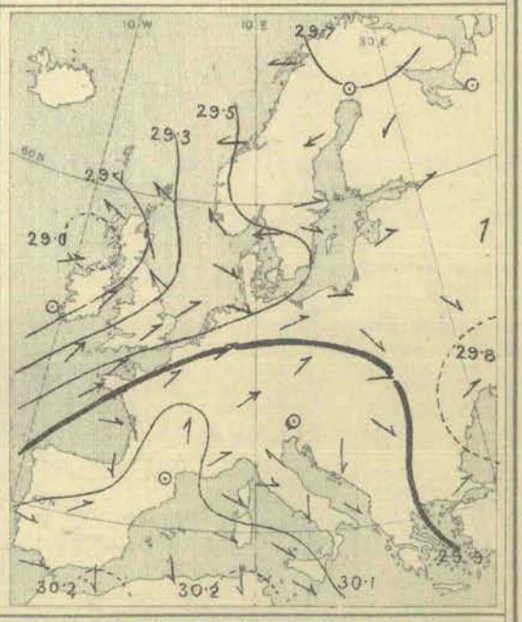
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over the Mediterranean and south-western Europe, as well as in many parts of Sweden, Norway, and Scotland, cloudy or overcast elsewhere, with rain in many parts of Ireland, England, and the Channel, snow at St. Petersburg and Kuopio. Very unsettled over the United Kingdom later, with large falls of rain in Ireland and the west of Scotland (1·2 ins. at Valencia, 1·0 in. at Ardrossan, 0·8 in. at Holyhead), snow, sleet, and hail at our northern stations, and over the Basin of the Baltic.

Temperature changing irregularly, risen rapidly over the north of Russia and in some parts of Sweden. Morning readings, 50° and more on several parts of the Spanish coasts and the southern shores of the Mediterranean, and exceeding 45° on most of the Atlantic coasts of France and the British Islands, much lower elsewhere—especially in the north. Lowest of all, (1) − 20° Fahr. at Haparanda, − 10° at Stockholm, + 1° at Archangel, 5° at St. Petersburg, 9° at Wisby; (2) 20° at Nairn, 23° at Wick, 26° at Aberdeen. Rising later to between 50° and 53° at many of our south-western stations, to 54° at Biarritz, and exceeding 65° at the Algerian stations and in the south of Italy; not reaching 40° in the north and east of Scotland.

Wind light and anticyclonic both over the south-western and extreme northern parts of Europe, light but cyclonic over Finland and Russia; fresh to moderate from South-West over western Germany, the north of France, and the greater part of England, Southerly on our extreme west and north-west coasts. Increasing in force from South-West at our southern stations later, becoming South-Easterly in Scotland, and inclined to freshen in evening.

Barometer highest, 30·3 ins. to 30·0 ins. over Spain, Algeria, and the greater part of Fance, 29·7 ins. and more over the northern parts of Scandinavia. Lowest, 29·4 ins. and less over the north-west of Ireland and adjacent parts of the Atlantic, 29·6 ins. and less in a shallow disturbance over the Gulf of Finland, 30·0 ins. and less in another over the Gulf of Genoa and the northern half of Corsica. Falling decidedly over England and Ireland all day as the depression off our north-west coasts moved eastwards; rising in Norway. New depression approaching Valencia at night.

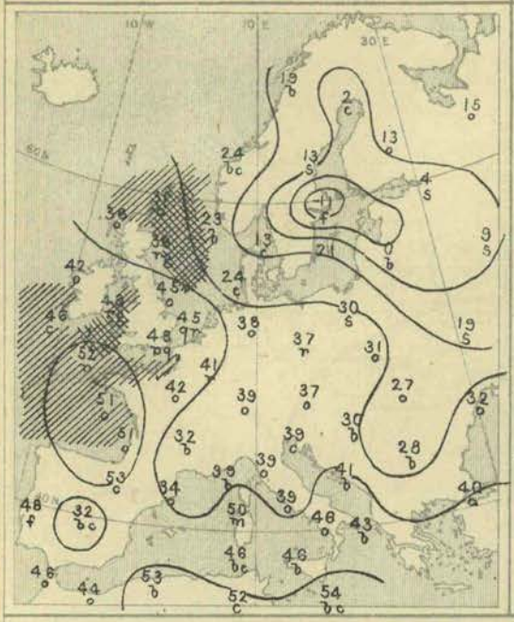
Judd & Co Ltd, Lith. 63. Carter Lane, Doctors' Commons.

III.—SUMMARY OF WEATHER OVER EUROPE.

Tuesday, 14th February.

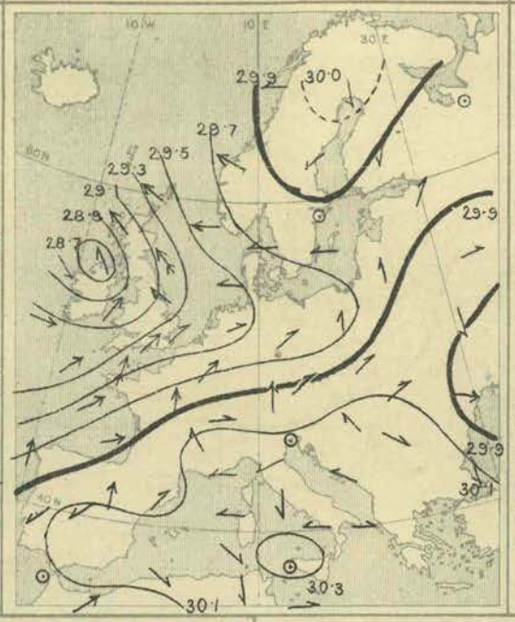
Temperature and Weather.

8 a.m.

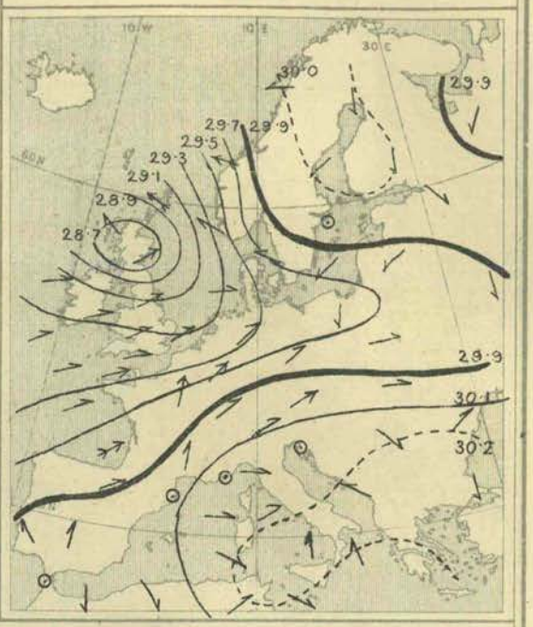


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning fine and bright, as a whole, over south-western and southern Europe, as well as in the west of Norway, very stormy and unsettled over the British Islands and their neighbourhood, with rain at many stations, cloudy or overcast over central and northern Europe, with snow in many localities. Rainfall general over Portugal, our Islands, the North Sea, the north of France, and north Germany later, with snow or hail in the north and north-west of the United Kingdom—amounts not large; thunder and lightning at Pembroke, fine over the southern half of France—except at the coast stations—where some rain fell.

Temperature risen fast over north-western and northern Europe, fallen decidedly over Russia, slightly over south-eastern Europe. Morning readings exceeding 50° at a few Mediterranean stations, as well as on the shores of the Bay of Biscay, and at Scilly, and above 45° over the greater part of Ireland and England; exceeding the freezing point over Germany, but as low as – 11° Fahr. at Stockholm, 0° (zero) at Riga, 1° at Uleaborg, 4° at St. Petersburg, 6° at Faerder, 19° at Bodö, 23° at Skudesnaes. Rising to between 50° and 54° over England and the west and south of France later, and to 64° at Biarritz, and 68° at Algiers.

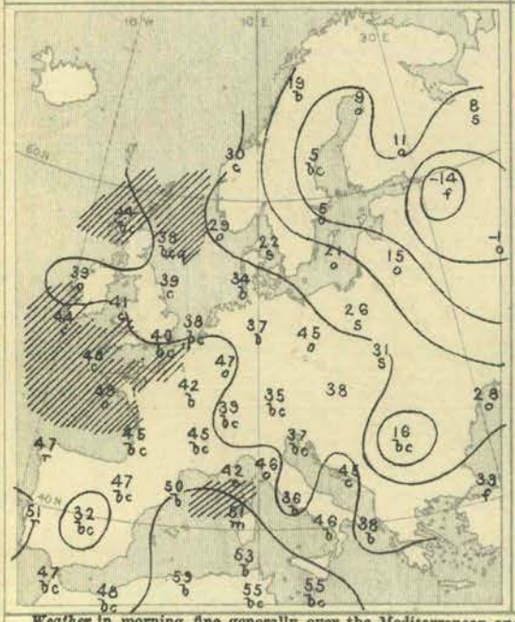
Wind light and variable over southern, eastern, and northern Europe; fresh to strong from the Southward over the Bay of Biscay and France; South-Westerly, strong to a gale, in the two Channels, Westerly and North-Westerly strong, in Ireland. South-Easterly, a "whole gale," in the east of Scotland; Easterly, strong, in the west of Norway. The South-Westerly gale in the south increasing in force during morning, and the South-Easterly gale blowing with great violence (force 11) in Scotland for some hours, but subsequently veering to South-West over Aberdeenshire and subsiding, Easterly gale setting in at Christiansund.

Barometer highest, (1) 30·2 ins. and more over the Mediterranean, southern, and south-eastern Europe; (2) 30·0 ins. and more to 29·3 ins. over Lapland, Finland, and Sweden. Lowest, 28·7 ins. and less in a deep depression over the north of Ireland, and below 29·6 ins. in a "V" spreading eastwards to Denmark. Main disturbance moving north-eastwards later, but barometric recovery in its rear by no means rapid.

Wednesday, 15th February.

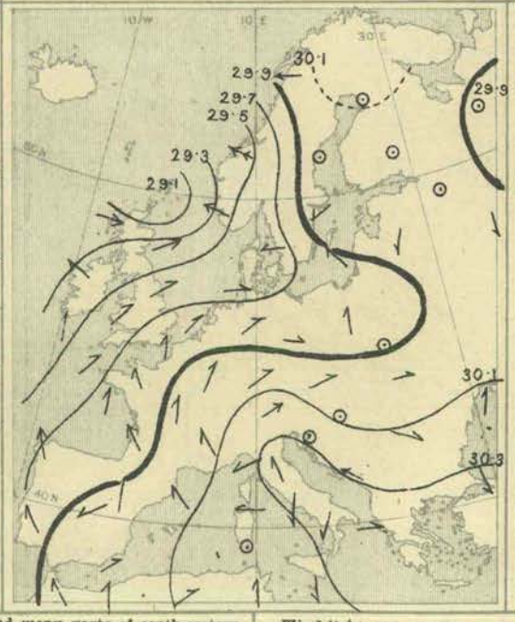
Temperature and Weather.

8 a.m.

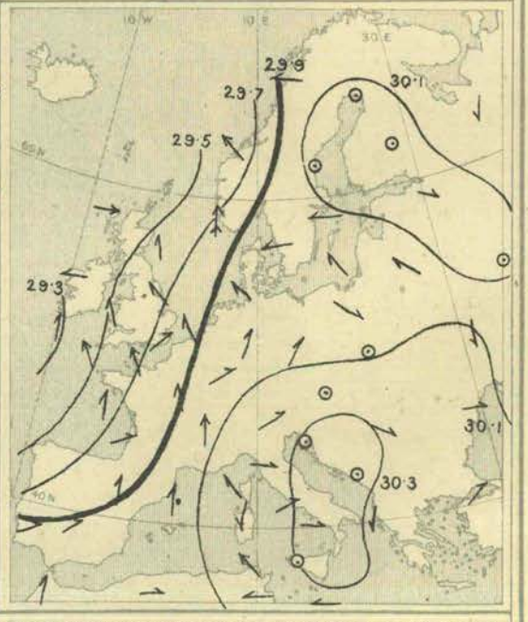


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning fine generally over the Mediterranean and many parts of south-eastern Europe, France, England, and Scandinavia, cloudy or overcast elsewhere, and very changeable over the United Kingdom generally. Rain falling in Portugal, at several of the English Channel stations, rain and snow over eastern Germany and Poland, snow at Archangel. Fog prevalent over the Gulf of Finland. Rain falling later in nearly all parts of the British Isles, the west of France, and Portugal, and hail at Valencia. Lightning seen at Scilly, aurora in Scotland at night.

Temperature fallen fast over Russia and Hungary, risen on the eastern shores of the North Sea, changing very fitfully elsewhere. Morning readings, 50° to 59° on the southern and western shores of the Mediterranean, and 51° at Lisbon, 49° at Lorient, 48° at Jersey and Scilly, and above 40° in the south and south-west of our Islands, as well as at Stornoway and over the north of France and central Germany. Lowest, – 14° Fahr. at St. Petersburg, – 7° at Helsingfors, + 5° at Kharkov and Stockholm, 8° at Archangel, 9° at Haparanda, 15° at Riga, 16° at Hermanstadt. Rising later to between 50° and 53° at some of our southern and south-western stations to 57° at Rochefort, 58° at Lyons, 60° at Perpignan, 62° at Palermo, 75° at Algiers, 79° at Nemours.

Wind light and variable over Russia, south-eastern Europe, and the Mediterranean, Southerly over nearly the whole of western Europe, but Westerly over Scotland, and Easterly, strong to a gale, in Norway. The Southerly current becoming strong and squally at some of our stations later, while the Easterly wind in Norway veered to South-East, but continued to blow hard, and the South-South-Westerly breeze in Holland backed to South-East.

Barometer highest, 30·3 ins. to 30·0 ins. over the Mediterranean, south-eastern, and southern Europe, and 30·1 ins. to 30·0 ins. over Lapland, Finland, and the northern half of Sweden. Lowest, 29·1 ins. and less in a depression lying to the northward of Scotland, 29·4 ins. and less in the west of Ireland, and 29·9 ins. and less over the north-east of Russia. Rising fast in Norway and Scotland later, falling somewhat over Ireland and the west and south of England.

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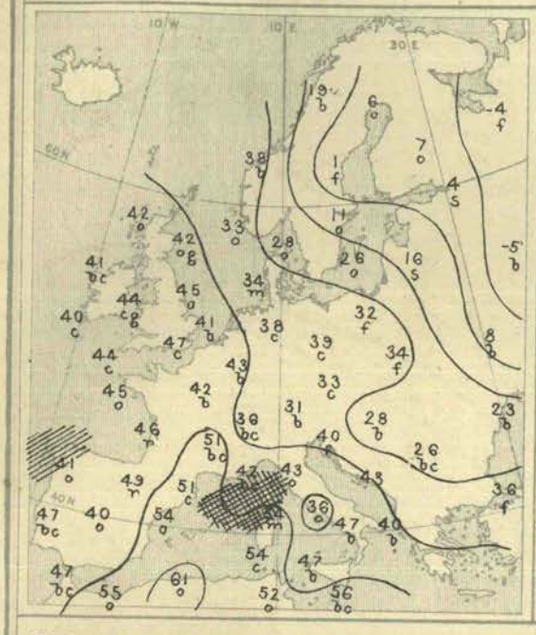
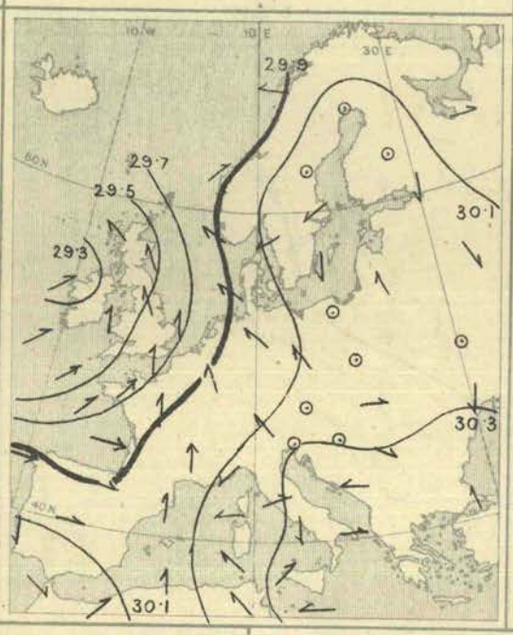
III.—SUMMARY OF WEATHER OVER EUROPE.

Thursday, 16th February.

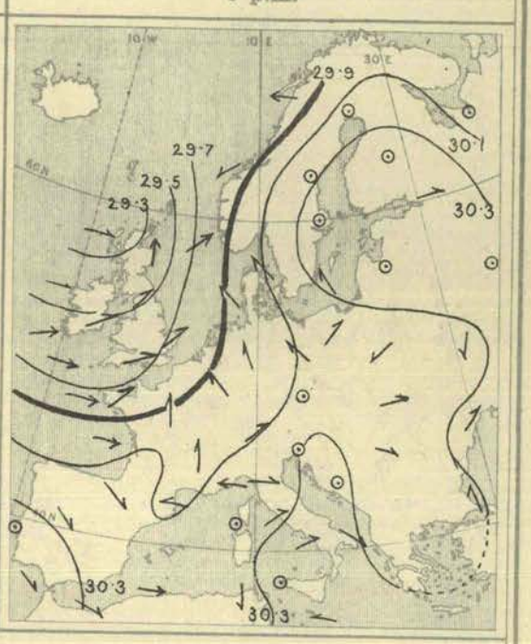
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over south-eastern Europe, as well as over the north-west of Norway, and at several stations in France and the east of England, cloudy more or less elsewhere, rainy over the English Channel, in the south-west of France, and at Wick. Rain more or less over the greater part of our Islands and France during the day: amounts small at the more northern stations, large in the south of France. Snow showers over northern Europe.

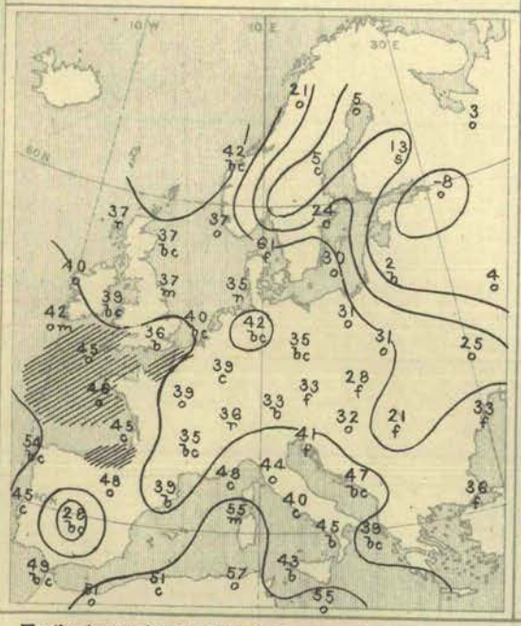
Temperature risen over the Baltic, as well as over England, not changed much elsewhere; morning readings highest, 61° at Algiers, and above 50° at several of the extreme southern stations; exceeding 40° over France and the United Kingdom, and exceeding the freezing point over central Europe. Lowest, − 5° Fahr. at Moscow, − 4° at Archangel, + 1° at Uleaborg and Hernösand: also, (1) 4° at St. Petersburg and Haugö, and 11° at Stockholm: (2) 2° at Kharkov, 8° at Kiev, 11° at Odessa, 16° at Riga. Rising to 50° or more at a few of our south-eastern stations later, and at Jersey, to between 54° and 59° in the south of France, and to 64° at Biarritz.

Wind very light and variable over Finland, Russia, central and south-eastern Europe; Westerly and South-Westerly, moderate, over the Bay of Biscay, Westerly to Southerly in Ireland, Southerly over England and the north of France, South-Easterly in Scotland and over the North Sea. Veering Westwards in the south of England and over Brittany later; becoming quite calm over northern Europe.

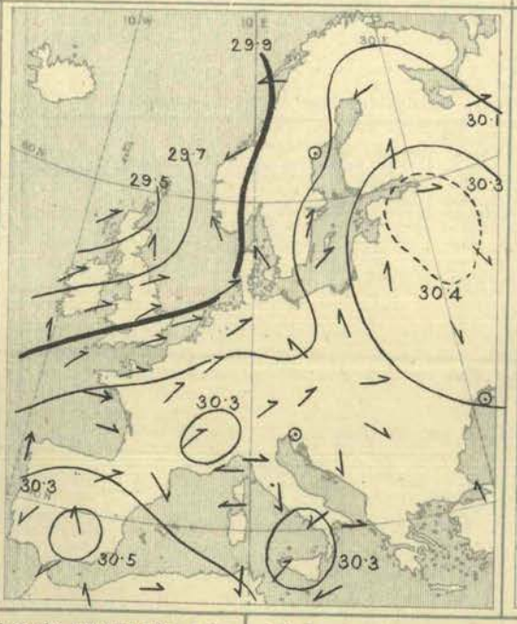
Barometer highest, 30·3 ins. and more to 30·2 ins. over the whole of south-eastern Europe, and exceeding 30·1 ins. all over Russia, the Baltic, and Sweden. Lowest, 29·3 ins. and less off the north-west of Ireland, and below 29·4 ins. on our western coasts generally. Depression in the west moving northwards later, and barometer rising in Ireland; secondary system advancing eastwards over Wales.

Friday, 17th February.

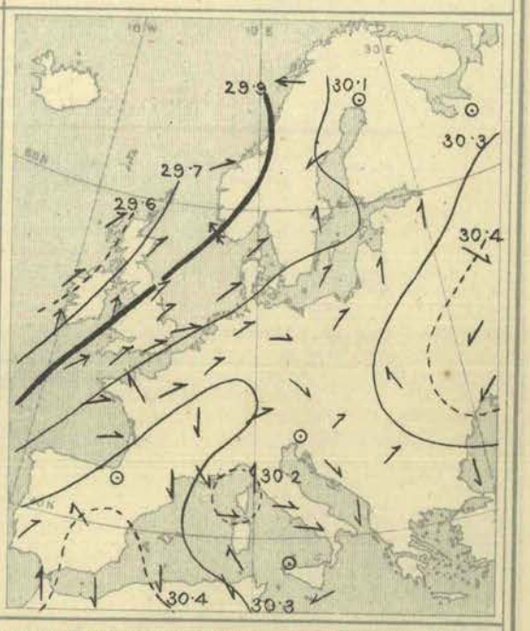
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over south-western Europe and on the southern side of the Mediterranean, as well as over several parts of France and Great Britain, very foggy over south-eastern and central Europe, and at some Baltic stations, dull in the far north; snow falling over Finland, rain at some of our own western and north-western stations. Showers later in all parts of the United Kingdom, and at many of the French stations, considerable rain in the Riviera, largest falls 0·6 in. at Belmullet, 0·5 in. at Ardrossan, and 0·4 in. at Nice; snow in Sweden.

Temperature changing little, falling over the north-western countries, rising over Russia. Morning readings exceeding 50° at stations on the southern and western sides of the Mediterranean only, exceeding 40° on the western coasts of France and the United Kingdom. Lowest, zero to − 8° Fahr. over the Gulf of Finland, + 2° at Riga, 3° at Archangel, 4° at Moscow, 5° at Uleaborg and Hernösand; much below the freezing point in southern Hungary. Rising later to 50° and more on our south-western coasts, in the west of France, and at Berlin, touching 59° at Biarritz, 61° at Sanguinaire, 63° Palermo and on the Algerian coast, 64° at San Fernando.

Wind very light and variable over northern, eastern, southern, and south-western Europe; moderate Westerly over Brittany, the English Channel, and south-east of England, South-Westerly in Scotland; Southerly, moderate to strong, in many parts of Ireland; Southerly to Easterly in Norway, South-Easterly to South-Westerly over the southern parts of the Baltic. Becoming Southerly still more generally on our western coasts later, and increasing somewhat in force; blowing a gale from South-East at Skudesnaes, and a strong breeze from East at Bodö.

Barometer highest, 30·5 ins. and more to 30·3 ins. over the Spanish Peninsula, 30·4 ins. to 30·3 ins. over central and western Russia, and exceeding 30·2 ins. over southern and south-eastern Europe generally and the Mediterranean. Lowest, 29·5 ins. and less over the northern half of Scotland. Gradients slight to moderate. Falling in the western parts of the United Kingdom later, rising a little in the north and east, as well as over France. Russian anticyclone moving south-eastwards.

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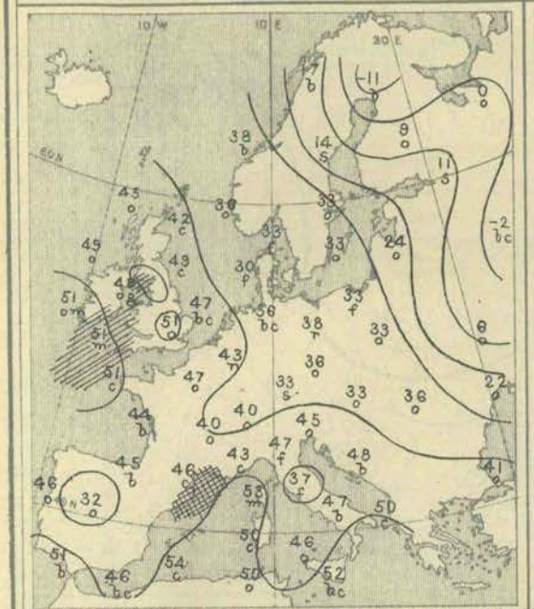
Saturday, 18th February.

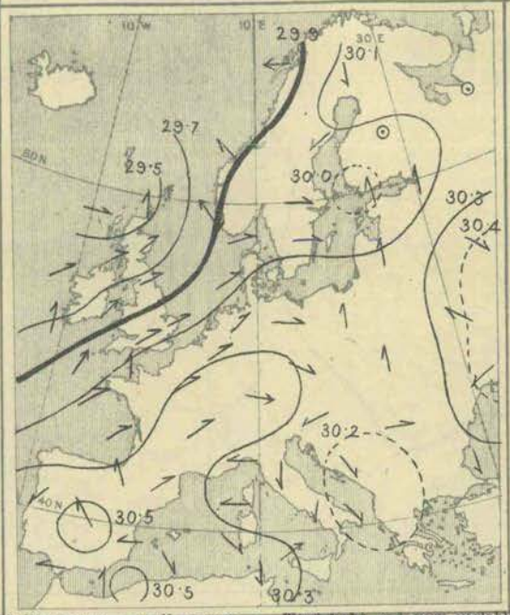
Temperature and Weather.

8 a.m.

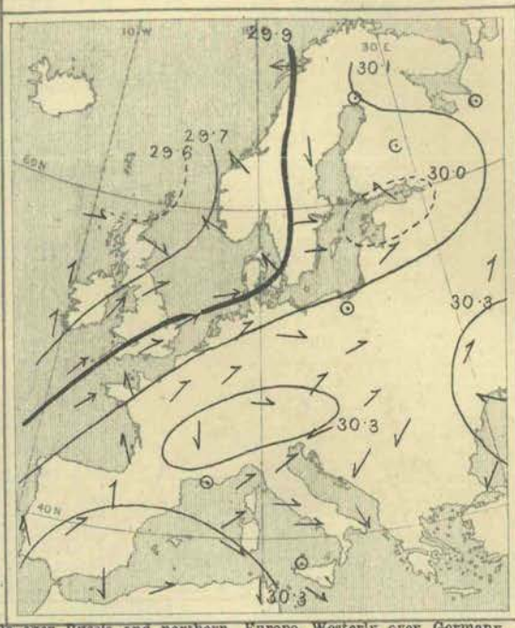


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning fine and bright on the southern shores of the Mediterranean, as well as over Norway and Lapland, fair over Russia, cloudy or overcast elsewhere, with rain at many of our western stations, rain and sleet in many parts of Germany, fog over the Baltic, Poland, and Hungary. Rain falling later over the western and southern parts of our Islands—not heavily—as well as over the north of France, Germany, Denmark, and the Netherlands, snow over the Baltic and north of Russia.

Temperature still changing very fitfully, risen decidedly over the United Kingdom, and still more so over the Baltic Provinces and Gulf of Finland, fallen fast over southern Russia. Morning readings exceeding 50° at several Mediterranean stations, and also in many of the western and southern parts of our Islands, and at Leith, above 45° on the east coast of England, and above 40° in the north-east. Lowest, − 11° Fahr. at Haparanda, − 6° at Kharkov, − 2° at Moscow, 0° (zero) at Archangel, Ulcaborg, and much below the freezing point over northern Europe generally. Rising later to 55° or a little more in many parts of our Islands later, to 61° at Rochefort, to 60° and more over Algeria and southern Italy, and to 70° at Biarritz. Succeeding night very mild.

Wind light and very variable over Russia and northern Europe, Westerly over Germany Southerly over Poland and the Baltic Provinces. Chiefly South-Westerly over the United Kingdom and North Sea (strong at our western and south-western stations), but South-Easterly in Norway and Easterly over the Spanish Peninsula. Becoming more Southerly over Ireland and England later, and shifting more to the Westward over north Germany, more to the Eastward over Denmark and the south of Norway, and to the Southward over Spain.

Barometer highest, 30·5 ins. and more to 30·8 ins. over Spain, the southern and central parts of France and south Germany, and 30·4 ins. and more to 30·3 ins. over Russia. Lowest, 29·5 ins. and less over the northern half of Scotland and the neighbouring parts of the Atlantic, and 30·0 ins. and less in a small shallow system at the mouth of the Gulf of Finland. Rising at our northern stations later, but beginning to fall decidedly in the south-west of Ireland at night.

GENERAL NOTES.

During the early part of the week a large anticyclone moved slowly eastwards across southern Europe and the Mediterranean, while cyclonic disturbances advanced in a north-easterly direction across the western and northern parts of our Islands. The depression which travelled across Ireland and Scotland on the 14th was of considerable depth, and occasioned strong gales on nearly all our coasts, the South-Easterly gale in the north of Scotland being of unusual severity. During the latter part of the week, the anticyclone spread northwards over Russia, and the type of weather over the western countries changed from South-Westerly to Southerly. The depression which continued to advance from the Atlantic now pursued a more northerly course along our extreme western coasts, and Southerly winds—varying in force from a moderate to a strong breeze—were experienced over the entire Kingdom. The weather of the period was mostly fine in the southern and eastern countries, but cloudy and unsettled elsewhere, with frequent rain in all parts of western Europe, and with occasional snow in the northern and central districts.

BRIGHT SUNSHINE Values for the Week in addition to those found on page 38.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	16·0	?	24	?	EASTBOURNE	14·1	?	20	?
OSWALDKIRK (Yorkshire)	13·2	?	20	?	TENBY	15·0*	?	22*	?
WORKSOP	12·5	−1·8	18	−3	NEWQUAY	12·5	?	18	?
THURCASTON (Leicestershire	9·6	−3·4	14	−5	TORQUAY	13·1*	?	19*	?
MARGATE	17·5	?	25	?	ARLEY COTTAGE (County Cavan)	19·5	?	29	?
WESTBOURNE (Sussex)	12·7*	?	18*	?	GUERNSEY	16·5*	?	24*	?
BRIGHTON	14·5	?	21	?					

The values at Westbourne, Tenby, Torquay, and Guernsey are obtained by Jordan's Photographic Recorder.

REPORTS received too late for insertion in their proper places.

DATE OF REPORT.	NAMES OF STATIONS.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each Day.	Of Lowest each Day.	For whole of each Day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-Degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°	°	°		Inches.	Inches.				
Dec. 31st, 1892.	Blackpool	36	19	33·2	22·1	27·9	−10·9	0	99	0	—	−0·71	4·8	−1·6	9	−3
Jan. 7th, 1893.	Newton Reigny	35	10	32·1	18·7	25·7	−11·0	0	114	5	0·11	−0·74	7·4	−0·4	15	0
„ 14th, „	Newton Reigny	42	27	36·6	29·2	33·1	− 3·9	0	62	2	0·05	−0·82	6·8	−1·7	13	−3
„ 21st, „	Newton Reigny	47	25	42·9	32·8	38·0	+ 0·8	3	34	6	0·25	−0·62	5·1	−4·1	9	−8
„ „ „	Blackpool	45	29	43·1	34·8	39·1	+ 0·8	3	27	5	0·23	−0·46	8·7	+1·3	16	+3
„ 28th, „	Newton Reigny	49	33	45·7	37·8	41·9	+ 4·7	10	18	4	0·44	−0·41	4·8	−5·4	8	−10
Feb. 7th, „	Scarborough	50	29	44·9	35·1	40·0	+ 0·7	8	26	5	0·33	−0·12	—	—	—	—

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WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; R. H. SCOTT, F.R.S., SECRETARY.
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VOL. X. No. 8.] *Third Series.* WEEK ENDING SATURDAY, 25TH FEBRUARY, 1893. [*Price 6d.* [*Annual subscription post paid, £1 10s. 0d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871-90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty-five years 1866-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90, only. BRIGHT SUNSHINE.—*The Mean values* employed are those for the corresponding periods in the ten years 1881-90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

	DISTRICTS. (See p. 44.)	Observed during the Week. Highest.	Observed during the Week. Lowest.	Averages of Daily Maxima.	Averages of Daily Minima.	Averages of Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	For the Week. Difference from Mean.	For the Week. Below 42°	For the Week. Difference from Mean.	Accumulated. From January 1st, 1893. Above 42°	From January 1st, 1893. Difference from Mean.	From January 1st, 1893. Below 42°	From January 1st, 1893. Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH -	54	24	41·8	31·0	36·4	2 below.	0	− 5	39	+ 5	45	− 6	317	+ 51
	1. SCOTLAND, EAST -	54	21	40·3	31·4	35·9	2 below.	0	−10	43	+ 9	43	− 24	347	+ 43
	2. ENGLAND, N.E. - -	57	25	41·9	34·2	38·1	1 below.	0	−10	27	− 2	48	− 14	294	+ 20
	3. ENGLAND, EAST -	59	27	42·6	34·7	38·7	1 below.	2	−10	26	− 7	56	− 12	369	+ 54
	4. MIDLAND COUNTIES	60	24	41·5	34·1	37·8	2 below.	0	−15	29	− 1	73	− 9	338	+ 32
	5. ENGLAND, SOUTH -	59	27	44·5	37·3	40·9	0 (average)	7	− 9	18	− 7	85	− 11	288	+ 51
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST -	55	19	42·7	33·9	38·3	2 below.	2	− 8	29	+ 4	79	+ 3	232	+ 12
	7. ENGLAND, N.W. -	59	24	41·3	34·9	38·1	2 below.	0	−10	27	+ 2	81	+ 11	236	+ 10
	8. ENGLAND, S.W. -	58	26	45·0	37·1	41·1	1 below.	8	−10	20	0	123	− 3	191	+ 20
	9. IRELAND, NORTH -	55	18	43·1	33·2	38·2	3 below.	3	−12	32	+ 9	111	+ 2	182	− 12
	10. IRELAND, SOUTH -	55	22	44·2	35·5	39·9	4 below.	6	−16	25	+ 8	160	− 4	136	− 10
	— CHANNEL ISLANDS -	53	38	48·2	41·8	45·0	0 (average)	22	0	1	− 5	187	+ 17	70	− 1

Rainfall.

	DISTRICTS. (See p. 44.)	For the Week. Number of Rainy Days.	For the Week. Total Fall.	For the Week. More or less than the Mean for the Week.	From January 1st, 1893. Number of Rainy Days.	From January 1st, 1893. Difference from Mean.	From January 1st, 1893. Total Fall.	From January 1st, 1893. Difference from Mean.
			10ths of In.	10ths of In.			Ins.	Ins.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH -	4	2	8 less.	43	+ 2	9·1*	− 0·5
	1. SCOTLAND, EAST -	4	5	1 less.	39	+ 9	4·6	− 0·4
	2. ENGLAND, N.E. - -	5	7	3 more.	34	+ 6	3·3	− 0·1
	3. ENGLAND, EAST -	5	11	7 more.	40	+11	4·1	+ 0·6
	4. MIDLAND COUNTIES	5	10	5 more.	38	+ 9	4·3	0·0
	5. ENGLAND, SOUTH -	5	13	8 more.	38	+10	4·9	+ 0·3
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST -	4	3	7 less.	40	+ 4	7·4	− 2·5
	7. ENGLAND, N.W. - -	5	5	1 less.	38	+ 6	4·7	− 0·7
	8. ENGLAND, S.W. - -	5	16	8 more.	38	+ 5	7·6	+ 0·5
	9. IRELAND, NORTH -	4	3	4 less.	42	+ 5	6·1	+ 0·1
	10. IRELAND, SOUTH -	5	10	3 more.	40	+ 5	7·7	+ 0·5
	— CHANNEL ISLANDS -	7	13	7 more.	44	+ 7	6·1	+ 0·2

Bright Sunshine.

	DISTRICTS. (See p. 44.)	For the Week. Hours recorded.	For the Week. Difference from Mean.	For the Week. Percentage of possible Duration.	For the Week. Difference from Mean.	From January 1st, 1893. Hours recorded.	From January 1st, 1893. Difference from Mean.	From January 1st, 1893. Percentage of possible Duration.	From January 1st, 1893. Difference from Mean.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH -	14	− 6	20	− 7	75	+ 1	17	+ 1
	1. SCOTLAND, EAST -	9	−12	13	−16	87	−25	19	− 6
	2. ENGLAND, N.E. - -	11	− 3	16	− 6	85	+ 2	18	0
	3. ENGLAND, EAST -	12	− 7	17	− 9	94	−14	19	− 3
	4. MIDLAND COUNTIES	10	− 6	14	−10	92	− 2	19	0
	5. ENGLAND, SOUTH -	16	− 1	22	− 3	92	− 2	18	− 1
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST -	9	− 8	12	−12	89	+ 5	19	+ 1
	7. ENGLAND, N.W. - -	9	− 6	13	−10	71	−17	15	− 3
	8. ENGLAND, S.W. - -	15	− 5	20	−10	117	+ 5	23	+ 1
	9. IRELAND, NORTH -	16	+ 1	23	+ 1	91	− 8	19	− 2
	10. IRELAND, SOUTH -	14	− 5	20	− 8	98	−19	20	− 4
	— CHANNEL ISLANDS -	24	0	33	0	121	−23	23	− 5

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather during this week continued in a very changeable and unsettled condition; much rain fell in England and the south of Ireland, and occasionally sleet or snow, but over the greater part of Scotland and in the north of Ireland the falls were comparatively slight, although of frequent occurrence.

Temperature was high at the commencement of the period, but soon decreased quickly, the average values for the week being from 1° to 2° below the normal in Great Britain generally, and 3° to 4° below over Ireland; in England S. and the Channel Islands, however, the mean was just equalled. The highest of the maxima were recorded on the 19th, when the thermometer rose to between 58° and 60° over the greater part of England, to 55° in Ireland and the west of Scotland, and to 54° in the north and east of Scotland. In the Channel Islands the highest reading was 53°. The lowest of the minima were registered, as a rule, on the 5th, and ranged from 18° in Ireland N., 19° in Scotland W., and 21° in Scotland E., to between 24° and 27° in most other districts and to 38° in the Channel Islands.

Rainfall was considerably less than the mean in Scotland N. and W., and rather less in Scotland E., Ireland N., and England N.W. In all other districts there was an excess, that in the southern and eastern parts of England and the Channel Islands being very large.

Bright Sunshine was somewhat less than the normal for the time of year in all districts, excepting Ireland N. and the Channel Islands. The percentage of the possible duration ranged from 12 in Scotland W., 13 in Scotland E. and England N.W., and 14 in the Midland Counties, to 23 in Ireland N., and 33 in the Channel Islands.

Barometer and Wind.—The changes in the barometric pressure during this period were great and frequent. At the commencement of the period a rather deep depression was moving northwards outside our western coasts, causing Southerly to South-Westerly winds—strong in the west—over the entire Kingdom. By the 21st, this system had disappeared, but another and deeper disturbance had approached the south-west of England, and, travelling east-north-eastwards during that and the following day, produced strong winds or gales on all our coasts—from East and North-East in the north, and from South-West veering to North-West and North in the south. No depression of importance followed immediately, but the barometer continued very low generally, with light winds between North-East and North-West, and at the close of the week a new system was approaching Scilly.

* This value has been altered owing to the receipt of further information.

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II.—DATA from which the SUMMARY on page 43 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°				Inches	Inches.				
0. SCOTLAND, N.	Sumburgh Head												*	*	*	*
	Stornoway	50	26	41·9	33·1	37·5	− 1·6	0	32	4	0·21	−0·71	11·3	− 5·9	17	− 7
	Wick	47	27	41·0	32·1	36·6	− 1·6	0	38	5	0·27	−0·25	*	*	*	*
	Lairg	50	26	41·2	30·1	35·7	− 1·2	0	44	4	0·49	−0·27	*	*	*	*
	Glencarron	53	24	42·4	29·4	35·9	− 1·6	1	41	2	0·21	−1·29	*	*	*	*
	Fort Augustus	52	24	41·8	29·5	35·7	− 2·8	0	44	5	0·17	−0·70	11·4	?	17	?
	Fort William	54	25	42·4	32·0	37·2	− 2·2	1	35	1	0·02	−1·81	18·9	?	27	?
1. SCOTLAND, E.	Nairn	49	28	40·4	29·7	35·1	− 3·5	0	48	3	0·69	+0·31	*	*	*	*
	Aberdeen	47	31	41·0	33·6	37·3	− 1·5	0	33	4	0·12	−0·48	7·0	−12·0	10	−18
	Braemar	45	21	36·0	27·4	31·7	− 3·8	0	72	5	0·61	−0·11	3·3 †	?†	5†	?†
	Ochtertyre	49	22	40·1	31·1	35·6	− 2·2	0	45	5	0·75	−1·09	*	*	*	*
	Leith	54	27	43·3	34·9	39·1	− 1·1	4	25	3	0·17	−0·20	*	*	*	*
	Marchmont	53	22	40·9	31·9	36·4	− 1·4	0	39	6	0·65	+0·06	13·5	?	19	?
2. ENGLAND, N.E.	Alnwick Castle	56	23	41·6	32·3	37·0	− 1·8	0	35	7	0·51	0·00	*	*	*	*
	Durham	54	25	41·8	32·4	37·1	− 1·4	0	34	5	0·61	+0·21	13·1	− 4·2	19	− 6
	Shields	56	28	43·3	35·6	39·5	− 0·4	1	24	3	0·62	+0·23	*	*	*	*
	Scarborough	55	27	41·6	34·1	37·9	− 2·0	0	29	4	1·04	+0·60	*	*	*	*
	York	57	28	42·1	35·4	38·8	− 1·0	0	24	5	0·86	+0·43	11·2	− 4·0	16	− 6
	Spurn Head	53	30	40·6	35·3	38·0	− 1·3	0	28	4	0·44	+0·10	*	*	*	*
3. ENGLAND, E.	Hillington	58	28	42·7	33·7	38·2	− 1·4	2	30	4	1·37	+0·93	13·8	− 4·5	19	− 7
	Yarmouth	52	30	40·9	35·4	38·2	− 0·6	0	27	7	0·99	+0·52	*	*	*	*
	Geldeston	57	30	43·4	34·5	39·0	− 0·9	4	28	5	0·88	+0·48	8·9	−10·5	12	−15
	Cambridge	59	29	44·6	35·0	39·8	− 0·2	7	26	6	1·06	+0·71	14·0	− 4·1	19	− 6
	Rothamsted	56	27	41·8	34·8	38·3	− 0·7	0	26	4	1·14	+0·66	12·3	?	17	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	58	24	41·4	31·6	36·5	− 3·4	0	39	4	1.17	+0·77	*	*	*	*
	Loughborough	60	30	41·7	35·3	38·5	− 1·6	0	25	5	0·76	+0·36	*	*	*	*
	Stamford (Ketton Hall)	59	29	41·7	34·6	38·2	− 2·4	0	27	4	0·96	+0·59	*	*	*	*
	Cheadle	55	27	40·4	32·7	36·6	− 1·9	0	33	6	0·77	+0·10	*	*	*	*
	Churchstoke	56	24	40·9	32·6	36·8	− 2·5	0	36	6	1·87	+1·08	10·6	− 6·4	15	−10
	Hereford	57	27	41·9	35·3	38·6	− 2·2	0	24	6	1·13	+0·65	*	*	*	*
	Cirencester	55	25	41·9	34·1	38·0	− 1·1	0	28	5	0·95	+0·36	11·7	− 7·8	16	−11
	Oxford	57	29	42·4	36·4	39·4	− 0·9	1	20	4	0·76	+0·32	11·4	− 6·1	16	− 9
5. ENGLAND, S.	London	59	30	43·9	36·7	40·3	− 0·7	5	20	4	1·00	+0·61	11·2 †	− 0·8†	16†	0†
	North Foreland	54	33	43·5	37·4	40·4	− 0·2	4	17	5	2·03	?	*	*	*	*
	Strathfield Turgiss	57	28	43·4	36·5	40·0	− 0·3	4	21	6	1·15	+0·67	*	*	*	*
	Dungeness	52	33	43·3	38·4	40·9	+ 0·2	2	14	7	1·05	+0·59	*	*	*	*
	Hastings (St. Leonards)	52	32	46·2	37·3	41·8	+ 0·8	12	20	4	1·54	+1·07	16·3	− 6·7	23	− 7
	Southampton	58	30	46·7	37·1	41·9	+ 0·1	13	20	5	1·15	+0·67	17·2	− 2·4	24	− 3
	Hurst Castle	51	31	44·9	38·7	41·8	+ 0·3	8	14	5	0·97	+0·47	*	*	*	*
	Stowell	54	27	43·9	36·3	40·1	+ 0·1	5	21	6	1·21	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	55	26	44·4	31·9	38·1	− 2·4	6	37	4	0·07	−1·66	*	*	*	*
	Glasgow	52	27	43·1	35·1	39·1	− 0·7	3	25	4	0·28	−0·48	1·1	− 6·9	10	− 9
	Ardrossan	50	26	42·4	34·6	38·5	− 2·1	1	26	3	0·14	−0·53	*	*	*	*
	Glenlee	50	19	42·3	32·5	37·4	− 1·1	1	33	3	0·22	−0·82	*	*	*	*
	Douglas (Isle of Man)	50	28	41·2	35·5	38·4	− 2·6	0	25	5	0·92	+0·15	9·8	−10·1	14	−13
7. ENGLAND, N.W.	Newton Reigny	54	24	40·2	32·2	36·2	− 1·6	0	41	5	0·35	−0·27	16·9	+ 1·1	24	+ 2
	Stonyhurst	54	29	41·1	34·6	37·9	− 1·8	0	29	5	0·53	−0·32	8·1	− 8·9	11	−13
	Blackpool	53	30	40·9	35·4	38·2	− 1·8	0	27	5	0·33	−0·17	6·8	− 9·9	10	−14
	Manchester	58	25	41·5	33·7	37·6	− 1·7	0	31	6	0.57	0·09	7·0 †	?†	10†	?†
	Liverpool Obsy. (Bidston)	57	29	41·3	36·1	38·7	− 2·1	0	23	5	0·54	+0·15	*	*	*	*
	Llandudno	59	29	42·7	36·0	39·4	− 2·7	2	22	5	0·76	+0·28	7·9	−10·1	11	−14
	Holyhead	53	29	41·4	36·6	39·0	− 3·2	0	21	5	0·47	−0·09	*	*	*	*
8. ENGLAND, S.W.	Llandovery	58	26	44·4	35·3	39·9	− 1·9	7	25	5	1·23	+0·35	*	*	*	*
	Pembroke	49	32	42·7	38·7	40·7	− 1·8	2	12	6	1·52	+0·92	8·0	−13·6	11	−19
	Arlington (N. Devon)	53	27	43·3	34·7	39·0	− 1·4	4	26	5	1·71	+0·76	*	*	*	*
	Cullompton	54	27	46·1	36·8	41·5	+ 0·4	11	21	5	1·71	+1·05	14·7	− 4·1	20	− 6
	Falmouth	51	34	46·6	38·2	42·4	− 1·8	19	11	6	1·80	+0·89	18·1	− 4·7	25	− 5
	Plymouth	54	32	46·1	38·1	42·1	− 1·1	17	11	5	1·80	+1·12	15·3	− 6·6	21	− 9
	Prawle Point	51	30	45·9	37·7	41·8	− 0·9	11	18	6	1·07	+0·59	*	*	*	*
9. IRELAND, N.	Malin Head	51	30	42·3	36·0	39·2	− 3·5	1	22	2	0·16	?	*	*	*	*
	Londonderry	55	28	45·9	33·2	39·6	− 2·1	11	34	4	0·29	−0·35	*	*	*	*
	Edenfel (Omagh)	51	25	42·6	32·9	37·8	− 2·4	2	33	3	0·18	−0·40	*	*	*	*
	Mullaghmore												*	*	*	*
	Belmullet	52	30	44·3	35·6	40·0	− 2·7	6	24	3	0·37	?	*	*	*	*
	Markree Castle	51	18	42·7	28·3	35·5	− 5·5	2	48	3	0·10	−0·57	18·5	+ 1·5	26	+ 3
	Brookeborough	52	23	43·0	30·4	36·7	− 3·4	3	41	4	0·32	−0·38	*	*	*	*
	Armagh	51	22	42·0	32·8	37·4	− 3·2	0	32	5	0·42	−0·15	15·5	− 1·3	22	− 1
	Donaghadee	50	31	42·0	36·4	39·2	− 2·1	0	20	6	0·64	+0·06	*	*	*	*
	Edgeworthstown	?	21	?	30·4	?	?	?	?	3	0·15	−0·54	*	*	*	*
10. IRELAND, S.	Dublin	53	26	43·2	35·1	39·2	− 3·6	3	25	7	0·99	+0·47	11·8	− 7·2	16	−11
	Parsonstown	53	22	42·7	33·0	37·9	− 3·6	2	32	5	0·40	−0·10	12·5	− 6·5	17	−10
	Kilkenny	50	24	42·9	35·0	39·0	− 3·6	3	25	5	0·48	−0·11	*	*	*	*
	Waterford	51	26	44·1	35·9	40·0	− 3·9	6	23	4	1·29	+0·49	*	*	*	*
	Roche's Point	51	32	44·9	37·6	41·3	− 2·8	8	18	6	2·22	+1·20	*	*	*	*
	Valencia	53	30	46·7	37·7	42·2	− 2·9	19	12	5	1·14	0·00	18·7	− 1·2	26	− 3
	Killarney	53	31	45·3	35·1	40·2	− 4·6	9	26	5	1·05	?	*	*	*	*
	Foynes	55	29	43·8	34·5	39·2	− 4·0	5	28	4	0·65	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	52	39	47·9	41·9	44·9	− 1·1	21	0	7	1·41	+0·81	*	*	*	*
	Jersey	53	38	48·4	41·6	45·0	+ 1·6	23	1	7	1·17	+0·55	24·5	− 0·5	34	0

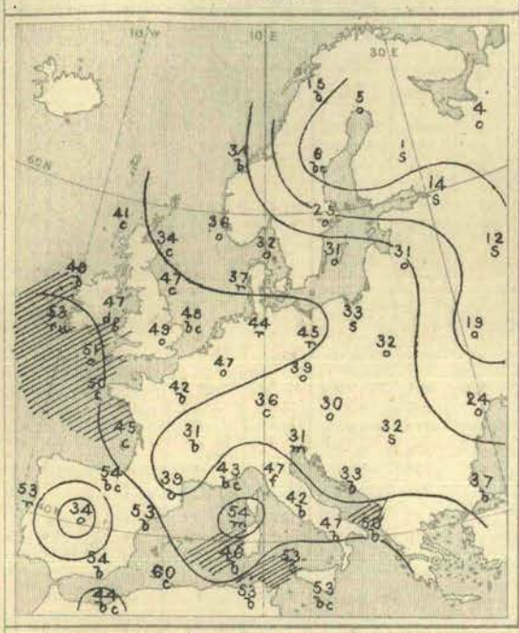
Stations marked ✠ are in connection with the Royal Meteorological Society, and those marked ⚓ with the Scottish Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

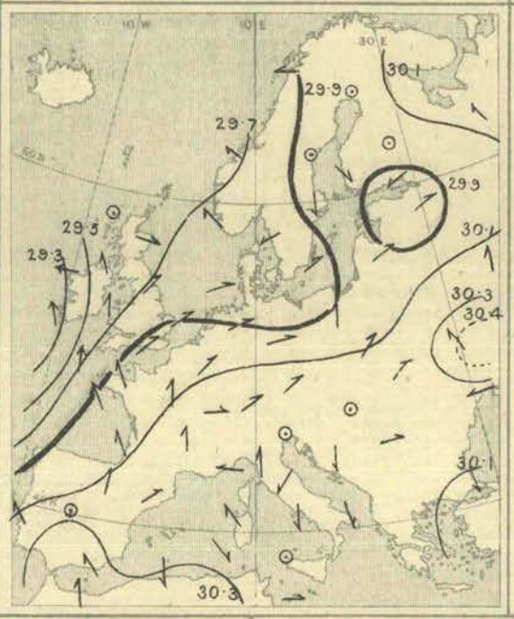
† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

Sunday, 19th February.

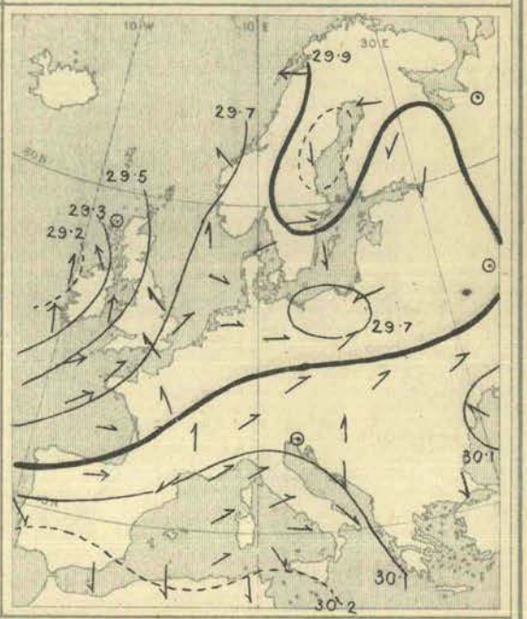
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine generally over the Mediterranean and southern Europe, as well as in some parts of France, the east of Scotland, and the west of Norway, cloudy or overcast in most other places, with rain at several of our western and southern stations, as well as over north Germany; snow at Hermanstadt, Neufahrwasser, Stockholm, and over the Gulf of Finland. Continuing very fine over the eastern half of England during the day, but somewhat rainy in the west and over Ireland, as well as in Germany and the west of France.

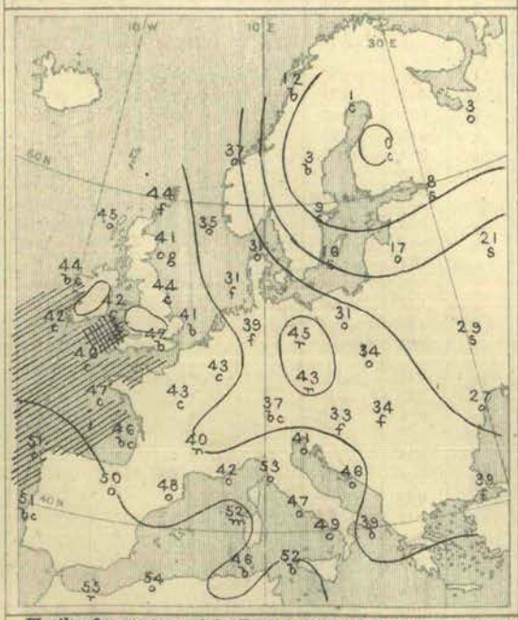
Temperature changing frequently and suddenly; fallen decidedly in Scotland. Morning readings exceeding 50° in the extreme south and south-west of Europe, as well on the south-west coasts of the British Islands; exceeding 40° over France and England, but as low as 33° to 34° in the east of Scotland; lowest, (1) 4° at Archangel and Uleaborg, 6° at Hernösand, 7° at Kuopio, 14° at St. Petersburg; (2) 3° at Odessa, 4° at Kharkov, 12° at Moscow. Rising later to between 55° and 60° over many parts of England, and to 50° or more in Ireland and at Leith; touching 64° at Biarritz, but below 60° at most of the Spanish and Italian stations.

Wind Southerly over the United Kingdom, the north of France, and the Bay of Biscay—moderate to a gale at the western stations, light to moderate over the Channel and England, calm in Scotland—light South-Easterly to Easterly in Norway. Very light and variable over northern, eastern, central, and southern Europe. Veering to South-West on our south-western coasts later, and to west over the Bay of Biscay; no important change occurring elsewhere.

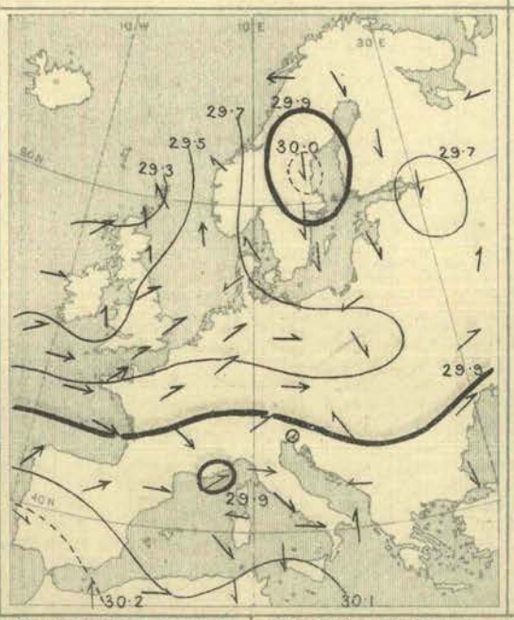
Barometer highest, 30·3 ins. and more over Algeria and the south-east of Spain, 30·4 ins. and more to 30·3 ins. over southern Russia, and exceeding 30·0 ins. over the greater part of the Continent. Lowest, 29·3 ins. and less over the west of Ireland and neighbouring parts of the Atlantic, 29·8 ins. and less in a secondary disturbance over Denmark and the south of Sweden, and 29·9 ins. and less in another shallow disturbance over the Gulf of Finland. Falling somewhat over western Europe during the day, but inclined to rise over Scandinavia.

Monday, 20th February.

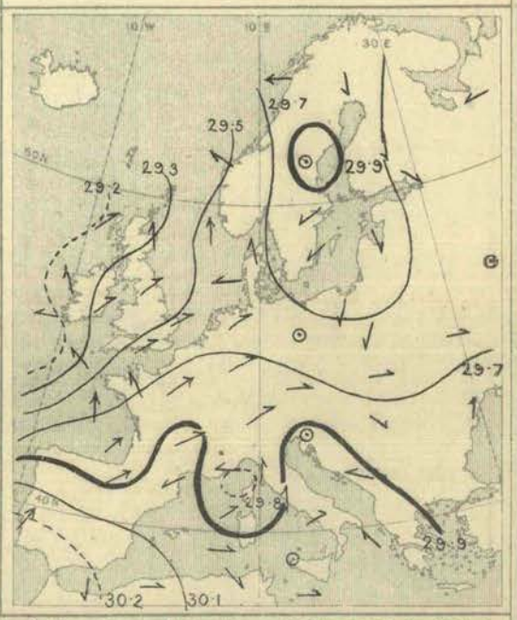
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fine at many of the English and Irish stations, but showery on some parts of our south and south-west coasts. Cloudy or overcast over Scotland and the greater part of the Continent, with fog over Holland, north Germany, and Austria, rain over western Algeria, the central parts of Germany, and at Lyons and Florence, and snow over Russia and the south of Sweden. Rain falling later over Ireland, England, and the greater part of the Continent—heavily over the south of England and the north of France.

Temperature fallen in most of the western and northern countries, but risen in Scotland, as well as over southern and south-eastern Europe. Morning readings highest, 55° at Nemours, 54° at Oran and Algiers, and 53° at Barcelona; above 50° on the western coasts of the Spanish Peninsula. Lowest, 0° zero at Uleaborg and Kuopio, 1° at Haparanda, and 3° at Archangel and Hernösand; considerably below the freezing point in most parts of Sweden and Russia, and slightly below it in Denmark. Daily maxima over our Islands ranging in most cases between 45° and 50°, thermometer exceeding the latter point in the west and south of France, and exceeding 55° in many parts of Spain and Italy.

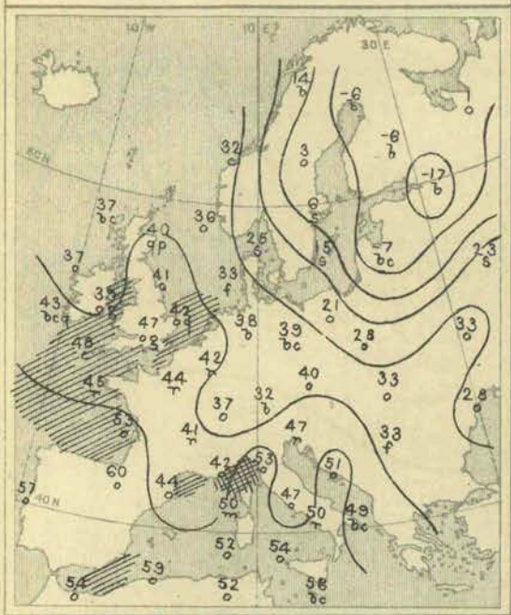
Wind light or moderate from the Southward over all the more northern parts of the United Kingdom, strong from between the Southward and Eastward in the west of Norway. Fresh or strong from the Westward or South-Westward over the south of our Islands and the west of France, and light or moderate from the same quarters in Germany. Northerly over Sweden, Finland, and the Baltic Provinces, but South-Westerly over the central and southern parts of Russia; rather variable over Spain and Italy, but chiefly Westerly. Subsequently backing to the South-Eastward or Eastward in the extreme west and south-west of our Islands, and to the Southward in the west of France.

Barometer highest, 30·2 ins. and upwards in a large anticyclone extending from the southward over Morocco and the south of Spain; 30·0 ins. and less in a small system lying over the Gulf of Bothnia. Lowest, 29·3 ins. and less in a depression off the north of Scotland (secondary disturbances passing eastwards across Ireland and England); 29·7 ins. and less in a shallow area over Russia. Well-marked depression advancing later to our south-west coasts, rapid fall of barometer setting in at night over the southern parts of the Kingdom generally.

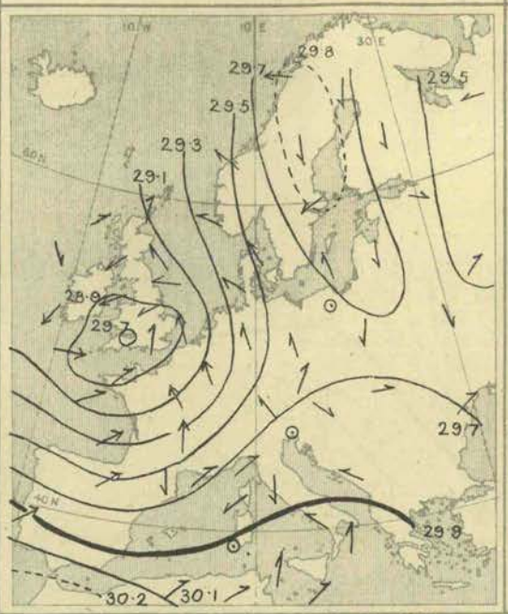
Judd & Co Lith. 63, Carter Lane, Doctors' Commons

Tuesday, 21st February.

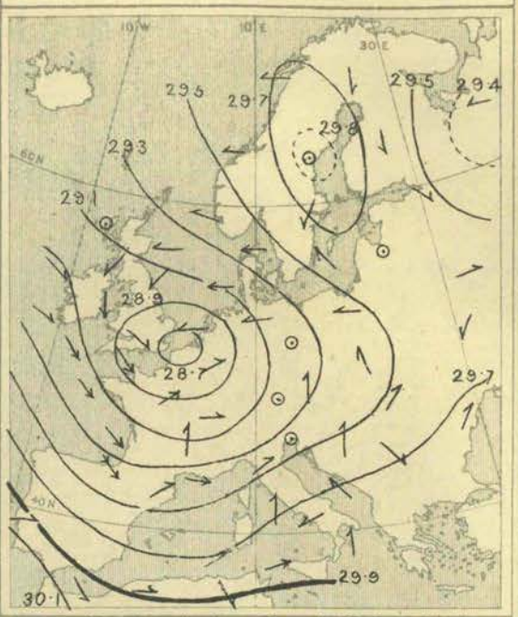
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather dull over Great Britain and the Continent generally, with rain in France, the Netherlands, and the eastern parts of England, and snow in Denmark, the south of Sweden, and some parts of Russia and north Germany. Fine and bright at several of the Irish stations, as well as in some of the more northern parts of Sweden and Russia. Rain falling during day over nearly the whole of western, central, and southern Europe; amounts large in many parts of England and France. Thunder and hail reported at Chassiron.

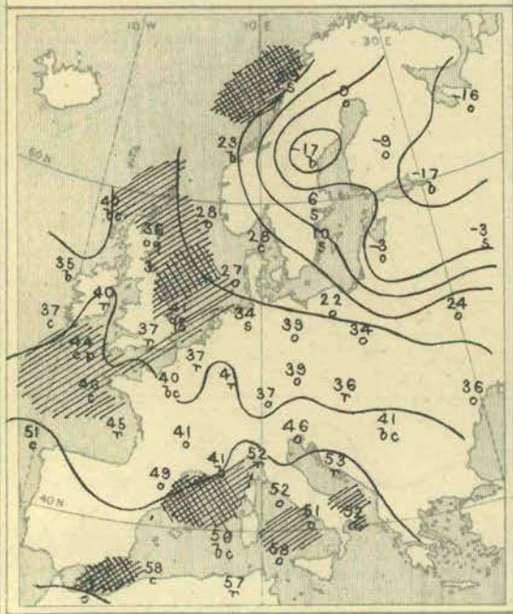
Temperature risen over England, France, and the greater part of southern and eastern Europe, but fallen elsewhere. Morning readings highest, 60° at Biarritz, 59° at Algiers, 57° at Lisbon, above 50° at the Mediterranean stations generally, but below it in the Riviera. Lowest, – 17° Fahr. at St. Petersburg, – 13° at Hangö, and – 12° at Uleaborg; considerably below the freezing point in Sweden, and slightly below it over the central and southern parts of Russia; below 40° in Scotland and central Ireland. Daily maxima below 45° in all the more northern parts of the United Kingdom, but thermometer exceeding 50° in the west and south of France, and exceeding 60° in the south of Italy.

Wind light and variable on our extreme north-west coasts; strong from the Northward in the south of Ireland, from the Westward over the Bay of Biscay and the western parts of the Channel, from the Southward in the south-east of England and the central parts of France, and from the South-Eastward over Norway, Denmark, Germany, the Netherlands, and the North Sea. Light from the Northward or North-Westward over Sweden and Finland, and from the South-Westward over the central and southern parts of Russia. Southerly in Italy and Algeria, and South-Westerly in Spain. Subsequently shifting to the North-Westward over the south of England and the west of France, and blowing with the force of a gale (temporarily) at the mouth of the Channel.

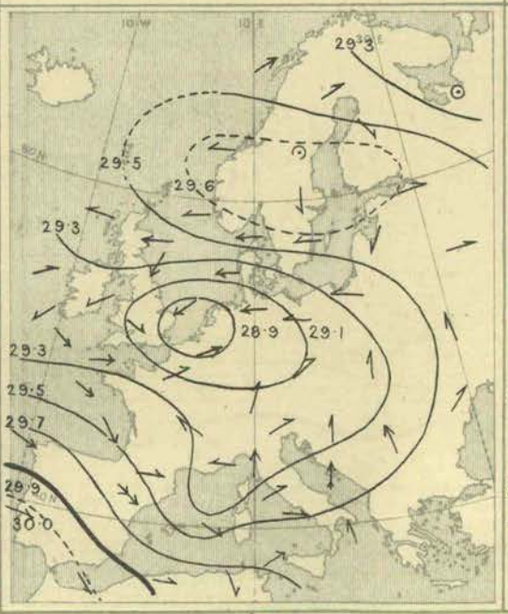
Barometer highest, 30·2 ins. and upwards over Morocco, 29·8 ins. and upwards over the northern parts of Scandinavia. Lowest, 28·8 ins. and less in a well-marked depression lying over the south of England. Gradients rather steep over the Bay of Biscay, Spain, France, and the Netherlands. Depression subsequently moving steadily eastwards, barometer falling below 28·7 ins. in the south-east of England. Rise taking place over the more western and northern parts of the United Kingdom.

Wednesday, 22nd February.

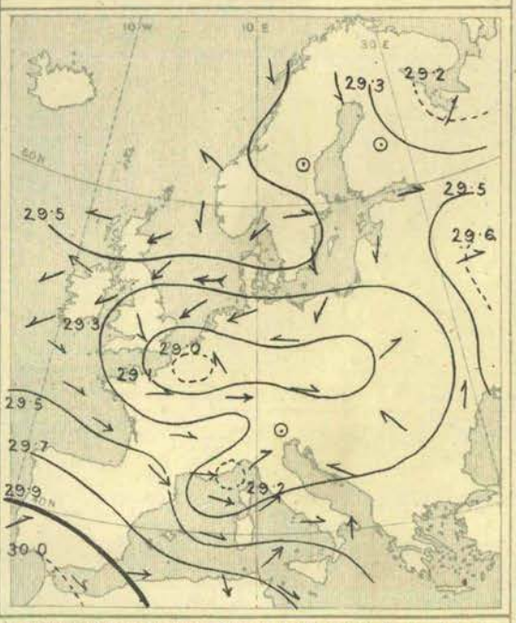
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather dull in the more northern and eastern parts of our Islands and also over the greater part of the Continent, with rain over England, the Netherlands, western Germany, as well as in many parts of Austria and Algeria. Snow falling in north Germany and the south of Sweden, as well as at Bodö and Moscow. Fine on some parts of our western and southern coasts, as well as in Spain. Rain, hail, or sleet falling during day over nearly the whole of our Islands, France, and central and southern Europe—heavily in places.

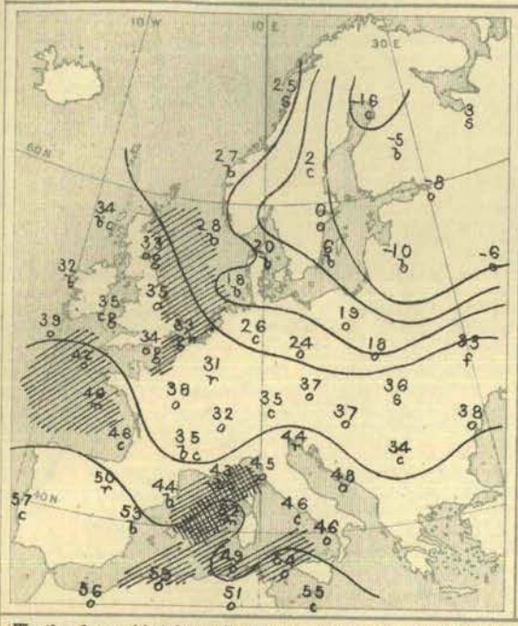
Temperature fallen generally, but risen at some of our own northern stations. Morning readings highest, 60° at Nemours and Oran, 58° at Palermo and Algiers, and 57° at La Calle; above 50° at most of the Mediterranean and Adriatic stations. Lowest, – 17° Fahr. at Hernösand and St. Petersburg, – 16° at Archangel, – 14° at Uleaborg, and – 9° at Kuopio; below zero over the northern and central parts of Russia generally, and below the freezing point over the whole of northern and eastern Europe, as well as in central Ireland. Daily maxima below 40° over the northern and eastern parts of the United Kingdom, but thermometer exceeding 50° in the west and south of France and exceeding 60° over the southern parts of Italy.

Wind moderate to strong from the Eastward over Norway, Denmark, the Baltic, Scotland, and the north of Ireland. Strong from the North-Eastward in the east of England, and from the North-Westward over the Channel and Bay of Biscay, light or moderate from the South-Westward over Belgium, central France, and the southern parts of Germany. Southerly in Italy, Austria, and the south of Russia. Variable in the north of Russia, South-Westerly in the north of Scandinavia, Westerly or North-Westerly in Spain and Algeria. No important change occurring during day, but wind increasing to a gale from the Eastward in some parts of Denmark and north Germany.

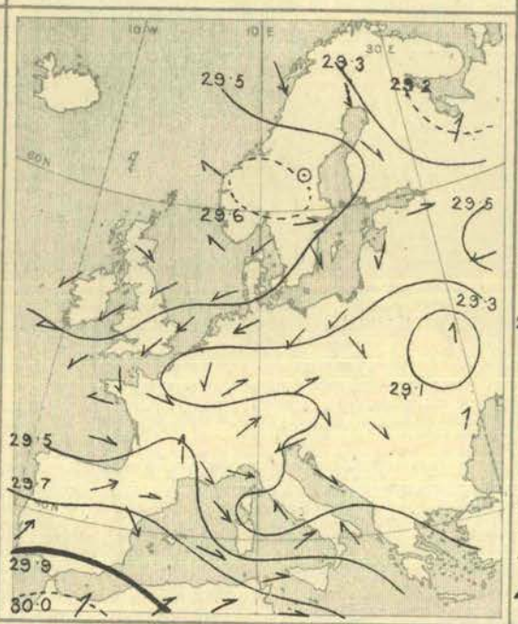
Barometer highest, 30·0 ins. and upwards over Morocco and the south of Spain, 29·6 ins. and upwards over Finland and the central parts of Scandinavia. Lowest, 28·8 ins. and less in a depression lying between the English and Dutch coasts; gradients steep over the North Sea, and rather steep over the Channel, the Bay of Biscay, and Spain. Depression moving slowly eastwards later and gradually filling up; barometer rising in all parts of western Europe.

Thursday, 23rd February.

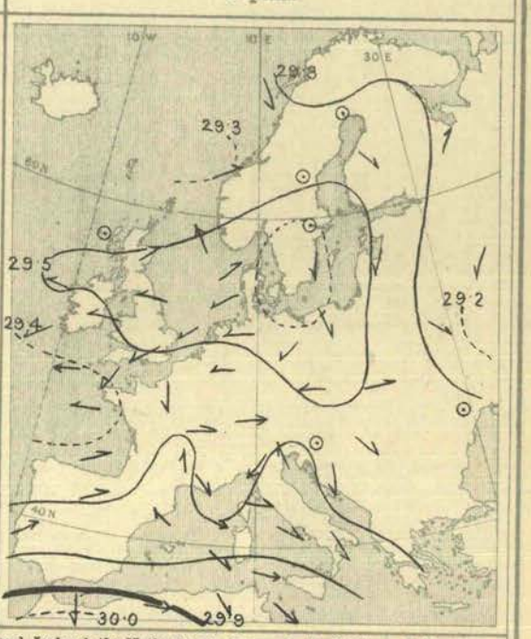
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fine and bright in the extreme north-west of our Islands, as well as over the greater part of Scandinavia, Denmark, the Baltic, Spain, and the south of France. Cloudy or overcast elsewhere, with sleet or hail showers over the south-eastern parts of England, rain at Brussels, Biarritz, and Trieste, and snow at several of the Russian stations. Rain falling later over France and the south-west of our Islands, as well as in many parts of Italy and Austria.

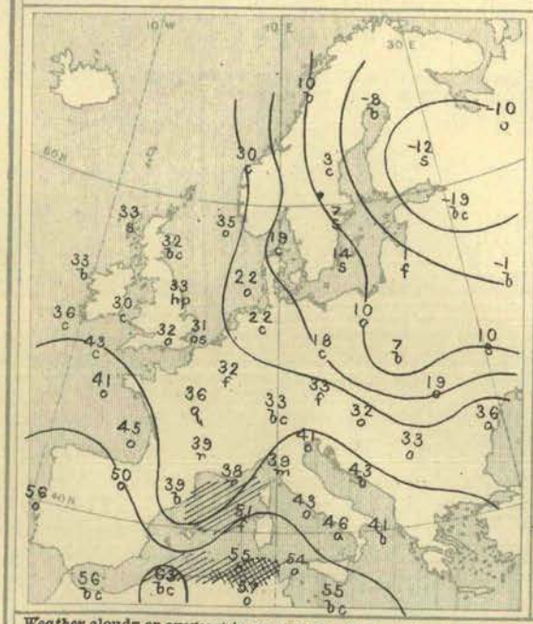
Temperature fallen generally, but risen in some parts of Scandinavia and northern Russia. Morning readings highest, 59° at Algiers, 57° at Lisbon, 56° at Nemours and Oran, and 55° at Malta, above 50° at most of the Mediterranean stations, but below 45° in the Riviera. Lowest, – 16° Fahr. at Uleaborg, – 12° at Haparanda, – 10° at Riga, – 8° at St. Petersburg; below zero over the north of Sweden and the northern and central parts of Russia generally, considerably below the freezing point in Denmark and north Germany, and slightly below it in the north of Scotland. Daily maxima below 40° in most parts of the United Kingdom, but exceeding 50° in the west and south of France, and exceeding 60° at Perpignan, as well as in the south of Italy.

Wind North-Easterly over England, Ireland, the Netherlands, Denmark, the Baltic, and the most northern parts of France and Germany, light or moderate in force generally, but strong on the east coast of England; light and variable in Scotland. Westerly or North-Westerly over the greater part of France; South-Westerly over the south of Germany. Light from the Northward or North-Westward in Finland and the south of Sweden; Southerly in the south of Russia. Light or moderate from the South-Westward in Algeria and the southern parts of Italy. No important change occurring over western Europe during day, but moderate to strong North-Westerly winds setting in over Italy.

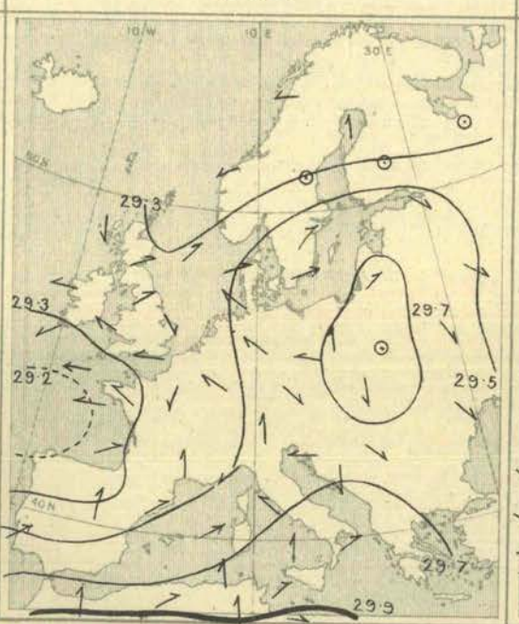
Barometer highest, 30·0 ins. and upwards over Morocco; 29·6 ins. and upwards over the central parts of Scandinavia. Lowest, 29·1 ins. and less in a depression lying over the south of Russia; trough of relatively low pressure extending across Germany, the Netherlands, the Channel, and north of France; 29·2 ins. and less in a depression lying over the north of Russia. Slight fall taking place later in most parts of western Europe, and shallow depression appearing off our south-western coasts. High-pressure system over Scandinavia moving southwards to the Baltic.

Friday, 24th February.

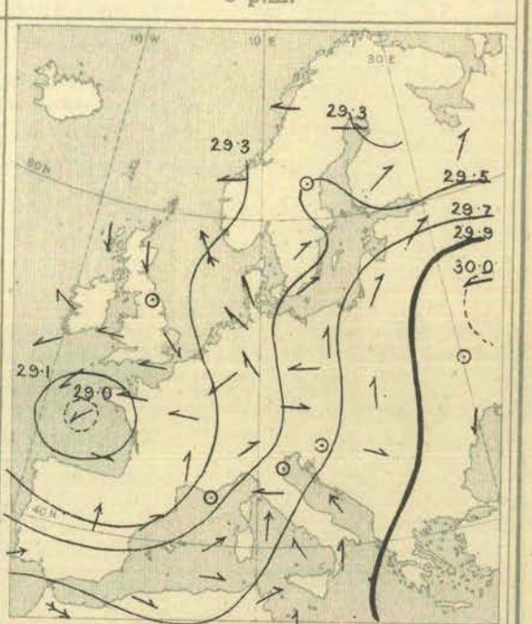
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather cloudy or overcast in most parts of our Islands, with snow or hail showers in several places, but fine in the east of Scotland. Cloudy also over the greater part of the Continent, with rain over the southern parts of France, and with snow at several of the Swedish and Russian stations. Fine in the north of Scandinavia, as well as over the Adriatic and Algeria. Heavy snow and rain falling later at Roche's Point, and heavy rain at several of the French stations, as well as over northern Italy. Thunder and lightning occurring in the west of France.

Temperature fallen at all but the Scandinavian and Danish stations. Morning readings highest, 63° at Algiers, 60° at Barcelona, 57° at La Calle, and 56° at Lisbon and Nemours, above 50° at most of the Mediterranean stations and also on the coasts of Spain, but below 40° in the Riviera. Lowest, – 19° Fahr. at St. Petersburg, – 18° at Uleaborg, – 12° at Kuopio, and – 10° at Archangel, below zero over the northern parts of Sweden and Russia generally, and below the freezing point over the whole of northern and eastern Europe, as well as in most parts of Great Britain. Daily maxima below 40° in many parts of our Islands, and as low as 32° at Holyhead. Thermometer exceeding 50° in the west and south of France, and exceeding 60° in Spain and the south of Italy.

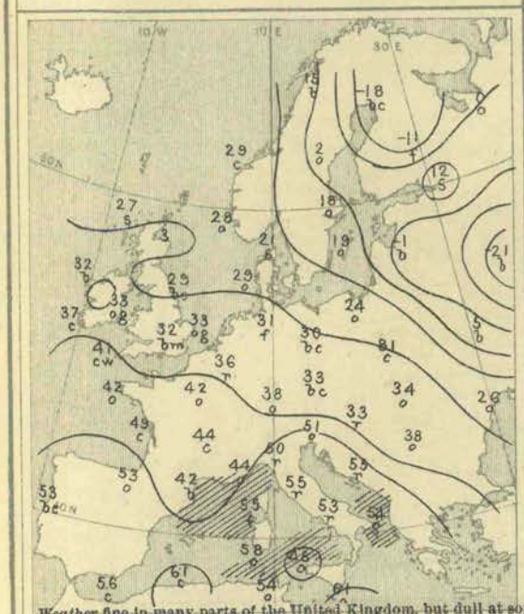
Wind moderate from the Southward or South-Westward in Spain, Algeria, and the southern parts of France, light or moderate from the Eastward over Ireland, England, Denmark, the Netherlands, and the northern parts of France and Germany. Light from between North and West in Scotland; South-Westerly over Sweden and the south of Norway, Easterly in the west of Norway. Northerly in the south of Russia; calm in Austria, light and variable in Italy. No important change occurring later.

Barometer highest, 29·80 ins. to 29·95 ins. over Algeria, the south of Italy, and the central parts of the Mediterrnnean; 29·7 ins. and upwards over Poland and the Baltic Provinces. Lowest, 29·2 ins. and less in a shallow depression lying to the south-westward of our Islands, 29·3 ins. and less in a large area stretching from the White Sea across the northern and western parts of Scandinavia to the north of Scotland. Depression in south-east subsequently moving eastwards, and barometer falling rather decidedly over France and the south of England. Rise taking place in most parts of northern and eastern Europe.

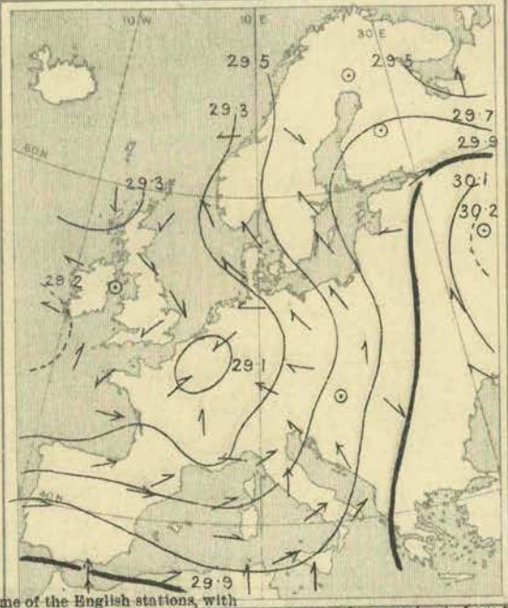
III.—SUMMARY OF WEATHER OVER EUROPE.

Saturday, 25th February.

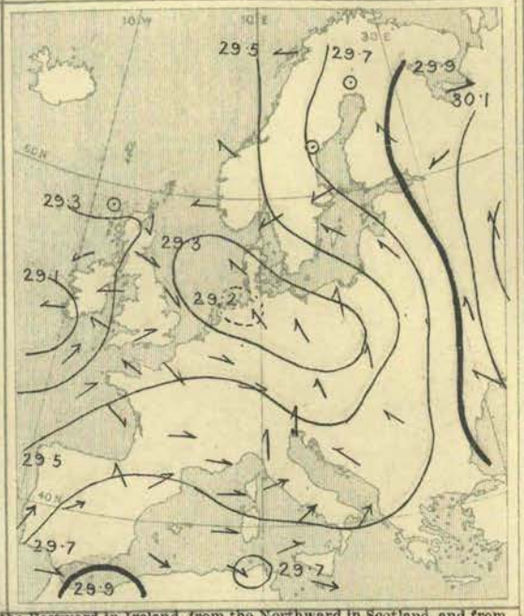
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fine in many parts of the United Kingdom, but dull at some of the English stations, with snow at Liverpool. Cloudy or overcast over the greater part of the Continent, with fog in Holland and north Germany, rain in Belgium, Italy, and the extreme south of France, and snow in some parts of Denmark and northern Russia. Fine and bright over central Russia and also in the north of Scandinavia. Heavy rain setting in at night over the south-west of our Islands and the north-west of France, and spreading quickly eastwards and northwards; lightning seen at Prawle Point. Large quantities of rain falling also in many parts of Austria and Italy.

Temperature fallen considerably over central and southern Russia, and slightly in the west and north of our Islands, but risen elsewhere. Morning readings highest, 61° at Algeria and Malta, 58° at Cagliari, and 56° at Nemours and Oran: above 50° at most of the Mediterranean stations, and also on the coast of Spain. Lowest, – 21° Fahr. at Moscow, – 18° at Haparanda, and – 11° at Kuopio; below zero at several of the Russian stations, below 20° in Sweden, and below the freezing point in many parts of the United Kingdom. Daily maxima below 40° at most of our own northern stations, but exceeding 45° in the extreme south. Rising above 50° in the west and south of France, and above 60° in Spain and Italy. Sharp frost occurring in the north of Scotland at night.

Wind light or moderate from the Eastward in Ireland, from the Northward in Scotland, and from the North-Eastward over the greater part of England. Westerly over Spain and the southern parts of France; South-Westerly or Southerly in Italy and Algeria; South-Easterly over Denmark, Germany, and the Baltic; Easterly in the west of Norway. Light from the South-Westward or Southward over the northern parts of Russia. Subsequently freshening from the Southward at the mouth of the Channel, and from the Eastward in the south of Ireland.

Barometer highest, 30·2 ins. and upwards in a large anticyclone lying over central Russia; 29·9 ins. and upwards in Algeria. Lowest, 29·1 ins. and less in a shallow depression lying over Belgium and the north-east of France; 29·2 ins. and less in another disturbance lying to the south-westward of Ireland. Former depression subsequently moving in a north-north-easterly direction to the North Sea; latter system advancing eastwards and occasioning decided fall of barometer on our south-west coasts.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force is indicated thus: ⟿ = a heavy gale; ⟿ = a gale; ⟶ = a fresh to strong breeze: ⟶ = a light to moderate breeze: and ⊙ = a calm. In the left-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Germany, Sweden, and Norway, and 7 a.m. in France, Algeria, Italy, Austria, and Russia; that for 6 p.m. is prepared from observations made at 6 p.m. in the British Islands and France, 7 p.m. in Algeria, 8 p.m. in Sweden and Norway, Germany, and Austria, and 9 p.m. in Russia, Belgium, and Italy. The time indicated in each case is the standard time for each country.

GENERAL NOTES.

At the commencement of the week a large anticyclone lay over southern Europe and the Mediterranean, while an area of relatively high-pressure existed over Sweden, the lowest readings being found in a well-marked depression which skirted our extreme western coasts. The anticyclone over the Mediterranean afterwards drifted further southwards, and depressions now began to advance directly over western Europe from the westward, the disturbance which passed across the south of England on the 21st being rather deep (with minimum pressures below 28·7 ins.) and occasioning strong gales from the Westward in the west of France. On reaching Germany the system soon dispersed, but on the 24th a new, though shallower, disturbance passed across the north of France and the Netherlands, while at the close of the week another depression was beginning to appear off the south-west of Ireland. The conditions were, therefore, extremely unsettled, not only in our Islands, but also over the greater part of the Continent, with frequent, and in many cases heavy, falls of rain. Temperature was fairly high in the more western countries, but exceedingly low in Sweden and Russia, the morning readings in those countries being, as a rule, several degrees below zero.

BRIGHT SUNSHINE Values for the Week in addition to those found on page 44.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	11·4	?	16	?	EASTBOURNE	12·2	?	17	?
OSWALDKIRK (Yorkshire)	8·2	?	12	?	TENBY	7·4*	?	10*	?
WORKSOP	8·4	–7·6	12	–11	NEWQUAY	18·6	?	25	?
THURCASTON (Leicestershire)	7·5	–7·3	10	–11	TORQUAY	21·7*	?	30*	?
MARGATE	13·5	?	19	?	ARLEY COTTAGE (County Cavan)	14·9	?	21	?
WESTBOURNE (Sussex)	20·5*	?	28*	?	GUERNSEY	23·0*	?	32*	?
BRIGHTON	19·6	?	27	?					

The values at Westbourne, Tenby, Torquay, and Guernsey are obtained by Jordan's Photographic Recorder.

Judd & Co Ltd, Lith. 63, Carter Lane, Doctors' Commons.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; R. H. SCOTT, F.R.S., SECRETARY.
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VOL. X. No. 9.] *Third Series.* WEEK ENDING SATURDAY, 4TH MARCH, 1893. [*Price 6d.* [*Annual subscription, post paid, £1 10s. 0d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871–90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty-five years 1856–90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90, only. BRIGHT SUNSHINE.—*The Mean values* employed are those for the corresponding periods in the ten years 1881–90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

DISTRICTS. (See p. 50.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 1st, 1893. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
	°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts. 0. SCOTLAND, NORTH	49	16	41·5	30·3	35·7	3 below.	0	− 5	44	+10	45	− 12	360*	+ 57
1. SCOTLAND, EAST	52	11	41·1	28·2	34·4	4 below.	0	−12	53	+19	43	− 35	400	+ 54
2. ENGLAND, N.E.	54	24	44·8	33·0	38·7	1 below.	8	− 4	32	+ 2	56	− 14	326	+ 12
3. ENGLAND, EAST	59	29	49·2	35·6	42·2	3 above.	28	+13	18	−15	84	+ 7	387	+ 28
4. MIDLAND COUNTIES	58	25	49·1	35·5	42·1	2 above.	28	+11	18	−13	101	+ 7	356	+ 9
5. ENGLAND, SOUTH	60	31	49·5	38·8	44·0	3 above.	27	+ 9	9	−16	112	+ 3	297	+ 24
Principal Grazing, &c., Districts. 6. SCOTLAND, WEST	53	17	43·7	32·7	38·0	2 below.	5	− 5	32	+ 7	84	0	264	+ 11
7. ENGLAND, N.W.	53	16	45·9	35·2	40·4	0 (average)	11	0	25	− 1	92	+ 13	261	+ 1
8. ENGLAND, S.W.	59	23	49·8	38·9	44·2	2 above.	28	+ 9	9	−12	151	+ 10	200	+ 3
9. IRELAND, NORTH	56	22	47·0	35·9	41·3	0 (average)	14	− 2	24	+ 1	125	+ 2	206	− 14
10. IRELAND, SOUTH	57	21	49·0	36·5	42·5	1 below.	27	+ 5	15	− 3	187	+ 4	151	− 11
— CHANNEL ISLANDS	56	38	51·8	43·3	47·4	3 above.	38	+15	0	− 7	225	+ 38	70	− 12

Rainfall. Bright Sunshine.

DISTRICTS. (See p. 50.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 1st, 1893. Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 1st, 1893. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
		10ths of In.	10ths of In.			Ins.	Ins.								
Principal Wheat-producing Districts. 0. SCOTLAND, NORTH	6	6	3 less.	49	+ 4	9·8*	− 0·7	10	0	14	0	85	−10	16	− 2
1. SCOTLAND, EAST	5	9	3 more.	44	+10	5·5	− 0·1	15	− 4	20	− 4	102	−29	19	− 6
2. ENGLAND, N.E.	5	12	8 more.	39	+ 7	4·5	+ 0·7	19	0	25	0	105	+ 2	19	0
3. ENGLAND, EAST	6	9	5 more.	46	+13	5·0	+ 1·0	20	− 1	26	− 1	114	−15	20	− 3
4. MIDLAND COUNTIES	5	5	1 more.	43	+11	4·8	+ 0·1	23	+ 5	30	+ 5	115	+ 2	20	0
5. ENGLAND, SOUTH	6	10	5 more.	44	+13	5·9	+ 0·9	13	− 7	18	− 8	105	− 8	18	− 2
Principal Grazing, &c., Districts. 6. SCOTLAND, WEST	6	14	5 more.	46	+ 7	8·8*	− 2·0	21	+ 2	28	+ 3	110	+10	20	+ 2
7. ENGLAND, N.W.	5	13	7 more.	43	+ 8	6·0	0·6	19	+ 2	25	+ 2	90	−18	16	− 3
8. ENGLAND, S.W.	5	8	1 more.	43	+ 7	8·4	+ 0·5	24	+ 2	31	+ 1	141	+ 7	24	+ 1
9. IRELAND, NORTH	5	10	4 more.	47	+ 6	7·1	+ 0·5	13	+ 1	26	+ 1	110	− 2	20	0
10. IRELAND, SOUTH	4	7	1 less.	44	+ 5	8·4	+ 0·5	20	− 2	26	− 4	118	−17	21	− 3
— CHANNEL ISLANDS	6	10	4 more.	50	+10	7·1	+ 0·6	18	−12	24	−15	139	−33	23	− 6

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather continued in an unsettled condition in all parts of the Kingdom, with a good deal of rain in all the more southern districts, and heavy snow, sleet, and rain in the north.

Temperature was rather below the mean in Scotland, as well as in England N.E. and Ireland S., and just equal to it in England N.W. and Ireland N.; in the other districts there was an excess of 2° or 3°. The highest of the maxima were recorded, as a rule, either on March 2nd or 4th, when they ranged from 60° in England S., and 59° in England E. and S.W., to 52° in Scotland E. and 49° in Scotland N. The lowest of the minima were registered on Feb. 26th or 27th, when the thermometer fell to 11° in Scotland E. (at Nairn), to 16° in Scotland N. and England N.W., and to 17° in Scotland W.; elsewhere the minima ranged from 21° in Ireland S. and 22° in Ireland N., to 31° in England S., and to 38° in the Channel Islands.

Rainfall was rather less than the mean in Scotland N. and Ireland S., but more in all other districts. Over the northern parts of England and the east of Scotland, the excess, which was large, was chiefly due to a heavy fall of snow and sleet occurring at the opening of the period—1·3 ins. being measured at Alnwick Castle on the 26th, 1·0 in. at Shields, and 0·9 in. at Aberdeen.

Bright Sunshine slightly exceeded the mean in some of the western districts and in central England, but showed a deficit elsewhere. The percentage of the possible duration ranged from 31 in England S.W., and 30 in the Midland Counties, to 18 in England S., and 14 in Scotland N.

Barometer and Wind.—Several depressions passed eastwards or north-eastwards over our Islands and their neighbourhood during this period, and the winds consequently varied considerably both in direction and force. The most important disturbances were (1) a well defined system which moved north-north-eastwards over Great Britain during the first day of the week, causing strong Southerly to South-Westerly winds and gales in the south and east, gales and strong winds from the Eastward in Scotland; and (2) a somewhat deep depression, the centre of which passed quickly eastwards across Scotland during the night of the 1st—2nd. This disturbance brought gales from between South and West to nearly all parts of the Kingdom. At the end of the period an area of high-pressure appeared to be approaching our south-western coasts and the wind was veering to West and North-West very generally.

* This value has been altered owing to the receipt of further information.

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II.—DATA from which the SUMMARY on page 49 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°				Inches	Inches.				
0. SCOTLAND, N.	Sumburgh Head												*	*	*	*
	Stornoway	49	22	42·3	30·1	36·0	− 3·1	1	40	6	0·27	−0·63	18·6	0·0	25	0
	Wick	49	18	40·9	29·1	34·8	− 3·6	0	50	5	0·79	+0·27	*	*	*	*
	Lairg Ⓢ	48	17	40·7	28·4	34·4	− 2·6	0	53	6	0·37	−0·39	*	*	*	*
	Glencarron Ⓢ												*	*	*	*
	Fort Augustus Ⓢ	48	16	41·3	29·7	35·3	− 3·2	0	47	7	0·63	−0·17	3·6	?	5	?
	Fort William Ⓢ	48	25	42·2	34·2	38·1	− 1·4	1	26	5	1·02	−0·68	8·3	?	11	?
1. SCOTLAND, E.	Nairn	50	11	41·6	24·7	32·9	− 5·9	0	64	5	0·41	+0·03	*	*	*	*
	Aberdeen	52	26	41·9	30·3	35·9	− 3·1	0	43	4	1·24	+0·64	17·0	− 3·8	23	− 6
	Braemar Ⓢ	43	14	37·5	25·2	31·2	− 4·4	0	76	4	0·39	−0·24	14·8†	?	20†	?
	Ochtertyre Ⓢ	52	24	42·6	30·0	36·1	− 1·0	2	41	6	0·81	+0·04	*	*	*	*
	Leith	51	27	43·1	30·7	36·7	− 3·7	3	39	4	0·83	+0·50	*	*	*	*
	Marchmont Ⓢ	44	22	39·9	28·1	33·8	− 3·9	0	57	5	1·54	+0·96	14·5	?	20	?
2. ENGLAND, N.E.	Alnwick Castle	54	23	45·0	34·9	39·8	+ 1·0	8	26	5	1·92	+1·39	*	*	*	*
	Durham	51	24	42·6	30·7	36·5	− 2·3	2	39	6	1·04	+0·62	18·3	− 1·2	25	− 2
	Shields	51	26	44·3	29·9	36·9	− 3·0	6	43	3	1·71	+1·31	*	*	*	*
	Scarborough 𝔐	52	30	45·1	35·7	40·3	+ 0·2	9	24	4	1·09	+0·69	*	*	*	*
	York	54	25	46·9	31·9	39·2	− 0·6	14	37	4	0·85	+0·45	17·5	0·0	24	0
	Spurn Head	49	30	45·0	34·7	39·7	0·0	8	27	6	0·55	+0·25	*	*	*	*
3. ENGLAND, E.	Hillington 𝔐	56	29	48·7	35·3	41·8	+ 1·8	19	27	6	0·75	+0·33	17·2	− 3·0	23	− 4
	Yarmouth	52	32	46·7	36·4	41·4	+ 2·5	13	22	6	0·77	+0·32	*	*	*	*
	Geldeston	56	31	49·7	35·7	42·5	+ 2·7	30	18	6	0·78	+0·38	20·9	− 1·1	28	− 1
	Cambridge	59	29	51·6	34·6	42·9	+ 2·8	37	21	6	0·87	+0·54	22·0	+ 1·5	29	+ 2
	Rothamsted	56	31	49·2	35·8	42·2	+ 2·6	27	17	7	1·12	+0·68	18·8	?	25	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	53	26	47·4	35·3	41·2	+ 1·2	15	26	4	0.56	+0·16	*	*	*	*
	Loughborough	58	27	50·6	34·1	42·1	+ 1·6	34	22	5	0·38	0·00	*	*	*	*
	Stamford (Ketton Hall)	58	27	50·1	34·7	42·2	+ 1·4	32	20	5	0·36	+0·06	*	*	*	*
	Cheadle 𝔐	53	27	47·3	35·1	41·0	+ 2·2	15	26	6	0·73	+0·10	*	*	*	*
	Churchstoke 𝔐	56	25	48·8	35·8	42·1	+ 2·6	27	17	5	0·53	−0·01	28·4	+ 8·4	38	+12
	Hereford 𝔐	57	27	49·7	37·2	43·3	+ 2·2	29	13	5	0·48	+0·06	*	*	*	*
	Cirencester	56	29	49·1	35·7	42·2	+ 2·9	28	18	6	0·53	−0·01	21·4	+ 0·1	29	+ 1
	Oxford	57	29	50·0	36·4	43·0	+ 2·4	31	16	6	0·64	+0·24	22·7	+ 2·7	30	+ 3
5. ENGLAND, S.	London	57	31	49·9	37·0	43·3	+ 2·1	30	14	7	1·02	+0·65	11·2†	− 2·8	15†	− 3
	North Foreland	54	35	49·0	38·7	43·7	+ 3·0	26	9	4	4·79	?	*	*	*	*
	Strathfield Turgiss 𝔐	59	31	50·3	37·1	43·5	+ 2·8	31	14	6	1·04	+0·59	*	*	*	*
	Dungeness	50	35	48·0	39·7	43·7	+ 2·8	22	6	5	0·61	+0·19	*	*	*	*
	Hastings (St. Leonards)	51	36	48·0	39·9	43·8	+ 2·4	21	6	5	0·87	+0·43	11·0	−14·6	15	−18
	Southampton	60	33	52·1	39·9	45·8	+ 3·8	35	6	6	1·27	+0·75	18·1	− 4·2	24	− 6
	Hurst Castle	50	32	48·6	39·6	44·0	+ 2·3	24	7	6	1·07	+0·60	*	*	*	*
	Stowell 𝔐	57	31	49·7	38·5	43·9	+ 5·8	28	10	6	0·92	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	53	25	43·5	32·5	37·8	− 2·8	4	33	6	1·10	−0·53	*	*	*	*
	Glasgow	49	26	41·5	33·4	37·3	− 2·5	0	33	5	1·04	+0·36	12·9	− 2·5	17	− 3
	Ardrossan	49	27	43·7	31·3	37·3	− 3·4	5	37	6	0·86	+0·26	*	*	*	*
	Glenlee Ⓢ	50	17	43·5	30·0	36·6	− 2·0	4	42	6	2·18	+1·24	*	*	*	*
	Douglas (Isle of Man)	52	26	46·1	36·5	41·2	+ 0·1	11	21	5	1·78	+1·08	28·6	+ 6·4	39	+10
7. ENGLAND, N.W.	Newton Reigny	50	16	42·9	28·8	35·6	− 2·6	3	45	4	1·60	+1·02	21·8	+ 3·4	29	+ 5
	Stonyhurst	49	24	43·9	34·7	39·2	− 0·5	5	26	6	1·92	+1·09	18·4	− 0·3	25	0
	Blackpool 𝔐	48	29	45·0	35·0	39·9	− 0·5	8	26	5	1·56	+1·06	23·2	+ 4·6	31	+ 6
	Manchester	52	26	47·2	35·4	41·1	+ 1·5	15	25	6	0.92	+0·37	12·7†	?	17†	?†
	Liverpool Obsy. (Bidston)	53	31	47·1	36·1	41·4	+ 0·5	14	23	6	1·09	+0·69	*	*	*	*
	Llandudno 𝔐	53	29	47·6	37·8	42·6	+ 0·3	22	12	5	0·75	+0·27	17·9	− 1·1	24	− 1
	Holyhead	51	32	47·3	38·3	42·7	+ 0·4	20	10	5	1·00	+0·43	*	*	*	*
8. ENGLAND, S.W.	Llandovery	57	23	50·4	35·1	42·5	+ 0·7	32	19	6	0·73	−0·17	*	*	*	*
	Pembroke	49	34	46·7	39·6	43·1	+ 0·6	18	7	5	0·68	+0·06	23·4	− 0·6	31	− 1
	Arlington (N. Devon)	54	27	48·1	36·7	42·2	+ 1·8	24	15	5	1·06	+0·07	*	*	*	*
	Cullompton 𝔐	59	30	51·9	39·0	45·3	+ 3·9	36	8	5	0·76	+0·08	22·2	+ 1·1	30	+ 1
	Falmouth	54	34	50·6	41·5	45·9	+ 1·8	29	1	5	1·26	+0·43	27·5	+ 2·5	36	+ 4
	Plymouth	54	34	50·3	41·2	45·6	+ 2·2	29	2	6	0·99	+0·35	22·3	− 2·2	29	− 3
	Prawle Point	56	32	50·3	39·1	44·5	+ 1·8	30	8	5	0·38	−0·07	*	*	*	*
9. IRELAND, N.	Malin Head	52	31	45·1	36·3	40·6	− 2·0	9	21	6	0·92	?	*	*	*	*
	Londonderry	54	29	47·2	36·5	41·7	+ 0·1	15	22	6	1·10	+0·50	*	*	*	*
	Edenfel (Omagh)	52	25	45·6	34·1	39·7	− 0·4	10	29	4	1·12	+0·58	*	*	*	*
	Mullaghmore	54	28	48·0	37·9	42·8	+ 0·1	23	11	4	0·69	0·00	*	*	*	*
	Belmullet	51	29	47·6	39·0	43·2	− 0·2	21	8	7	1·15	?	*	*	*	*
	Markree Castle	56	23	48·1	35·4	41·6	+ 0·6	17	26	6	0·82	+0·20	15·3	+ 3·5	21	− 4
	Brookeborough	52	23	46·9	34·6	40·6	+ 0·5	14	28	5	1·13	+0·46	*	*	*	*
	Armagh	54	27	47·5	35·7	41·4	+ 0·7	15	25	4	0·77	+0·26	22·2	+ 4·2	30	+ 6
	Donaghadee	52	30	46·3	34·4	40·2	− 1·2	12	29	7	1·00	+0·48	*	*	*	*
	Edgeworthstown	55	22	48·1	34·7	41·2	+ 0·9	17	28	5	0·96	+0·29	*	*	*	*
10. IRELAND, S.	Dublin	57	28	49·2	37·7	43·3	+ 0·4	27	12	4	0·24	−0·26	27·2	+ 6·2	36	+ 7
	Parsonstown	56	21	48·4	32·7	40·3	− 1·3	18	35	5	0·65	+0·15	19·2	− 1·9	26	− 2
	Kilkenny	55	21	48·7	33·9	41·1	− 1·5	19	32	4	0·48	−0·07	*	*	*	*
	Waterford	55	22	48·6	35·0	41·6	− 2·2	18	28	4	0·83	+0·08	*	*	*	*
	Roche's Point	53	29	48·4	37·3	42·7	− 1·4	25	13	4	0·80	−0·17	*	*	*	*
	Valencia	55	27	50·1	38·4	44·1	− 1·0	30	10	4	1·00	−0·07	12·5	−11·3	17	−14
	Killarney	55	22	48·6	36·8	42·5	− 2·1	25	15	6	0·89	?	*	*	*	*
	Foynes	57	26	49·6	40·0	44·7	+ 1·4	27	6	3	0·35	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	53	38	51·4	42·4	46·8	+ 0·9	34	0	6	0·96	+0·38	*	*	*	*
	Jersey	56	39	52·1	44·1	48.0	+ 4·3	42	0	6	1·10	+0·49	16·0	−11·9	21	−15

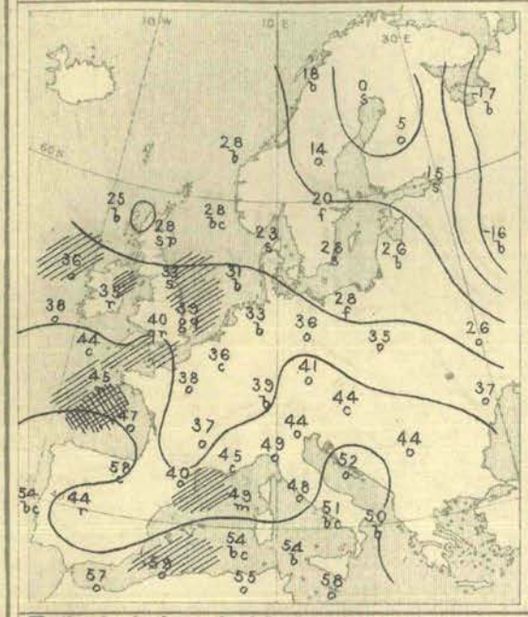
Stations marked 𝔐 are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

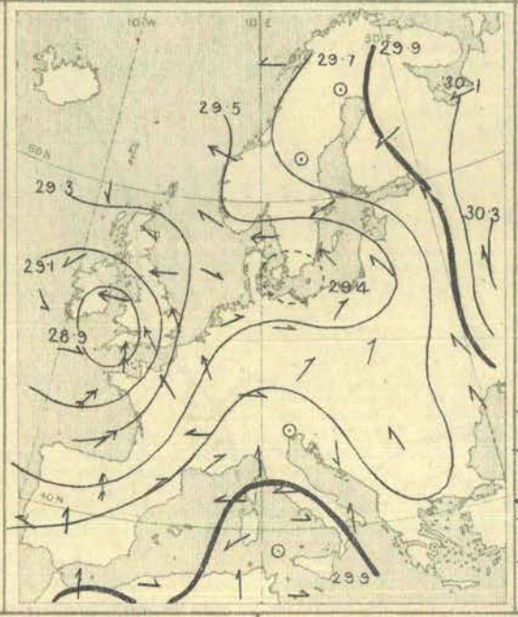
† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

Sunday, 26th February.

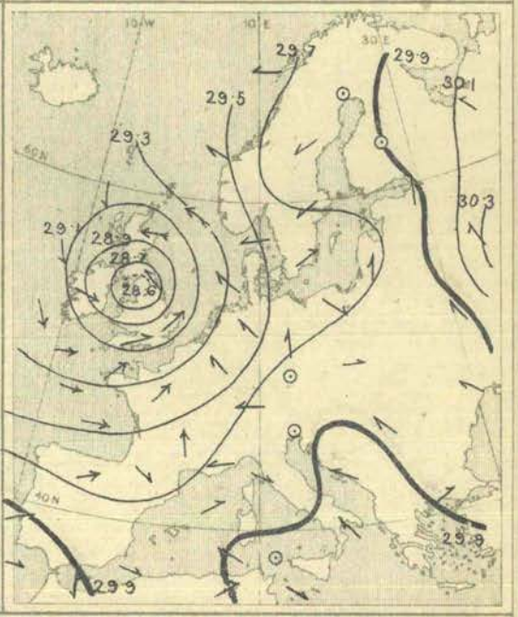
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fine in the north of Scotland, dull in all other parts of the United Kingdom, with snow over the northern parts of Ireland and England, and heavy rain in all the more southern districts, as well as in the north of France. Dull at many of the Continental stations, with fog in North Germany, rain over northern Austria and central Spain; snow falling at St. Petersburg and Wisby. Fine and bright in the west of Norway, the south of Denmark, and central Russia, as well as over the greater part of Italy. Heavy snow or rain falling later over all the more northern parts of the United Kingdom, rain in the south and over France.

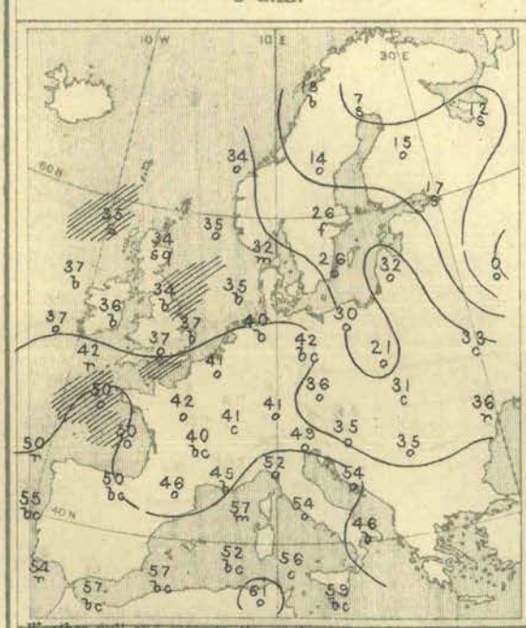
Temperature fallen in the north of Scotland, and over Italy and central France. Morning readings, 59° at Algiers, 58° at Biarritz and Malta, and 57° at Oran; above 50° at most of the Mediterranean stations. Lowest, – 17° Fahr. at Archangel, – 18° Fahr. at Moscow, and 0° (zero) at Haparanda; below 20° in most parts of Sweden and Russia and the north of Scotland; very little above the freezing point over the northern parts of England and Ireland. Daily maxima below 40° at most of our own northern stations, but 55° or more in the west and south of France, 60° and more over Italy, and reaching 70° at Perpignan and Nemours.

Wind showing a distinct cyclonic circulation over England, Ireland, and France, and blowing strongly in most places; Southerly gales in the Channel and Bay of Biscay, and Easterly gales in the north of Ireland. Light and variable breezes in the north of Scotland; light from the Southward or South-Westward in Italy and Algeria, from the Westward in Germany, from the South-Eastward in Russia, and from the Eastward in Scandinavia. Easterly gales setting in later over Scotland, but wind veering to the Westward on our south coasts and subsiding gradually.

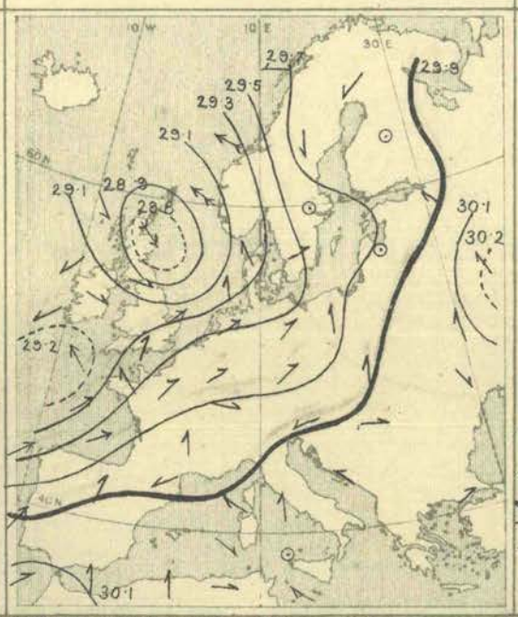
Barometer highest, 30·2 ins. and upwards in a large anticyclone lying over central Russia, 29·9 ins. and upwards over Algeria and the south of Italy. Lowest, 28·9 ins. and less in a rather deep depression lying over Wales and the west of England; 29·4 ins. and less in a shallower disturbance over Zealand and the south of Sweden. Depression in west subsequently travelling in a north-north-easterly direction and growing deeper, barometer falling rapidly over the northern parts of the United Kingdom.

Monday, 27th February.

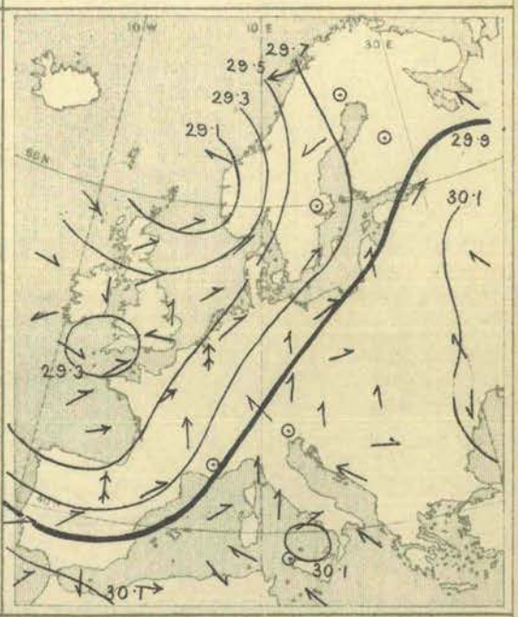
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather dull and rainy in the south of England, unsettled, with snow in the north and north-east of Scotland; fine and bright in other parts of the United Kingdom. Cloudy or overcast at most of the Continental stations, with snow in some parts of Scandinavia and northern Russia. Heavy rain falling during day over the south of England and most parts of France, and some snow over northern Europe, but weather improving somewhat in Scotland. Lightning seen at Prawle Point at night.

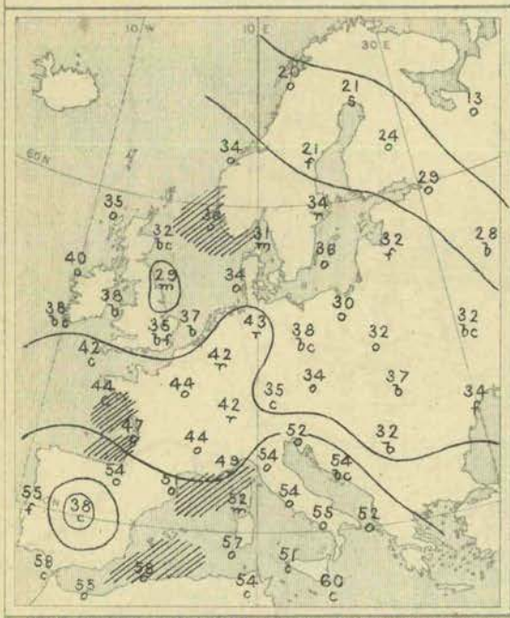
Temperature changed very irregularly, but risen quickly in the north of Scotland and in many of the northern parts of Russia. Morning readings highest, 61° at La Calle, 59° at Malta, and 57° at Barcelona, Oran, and Algiers, above 50° at most of the Mediterranean stations and also on the coasts of Spain. Lowest, 0° (zero) Fahr. at Moscow, 7° at Haparanda, 11° at Uleaborg, and 12° at Archangel; slightly below 32° over central Ireland, and below 35° in many parts of the United Kingdom. Daily maxima below 45° on all but our extreme southern coasts, but reaching 65° at Perpignan, 60° and more over Italy, 70° in Algeria, and 75° at Palermo and Laghouat.

Wind moderate to strong from the South-Westward over Spain, France, Germany, and the Netherlands; South-Easterly over the western parts of the Channel, and Easterly in the south of Ireland. North-Westerly over Scotland and the north of Ireland (a strong gale at Aberdeen), Westerly in the north of England, but Easterly, a gale, in west of Norway. Light from the South-Eastward over Russia, Southerly in Italy and Algeria. Strong South-Westerly winds setting in over the eastern parts of the Channel later, the gale in Scotland subsiding gradually.

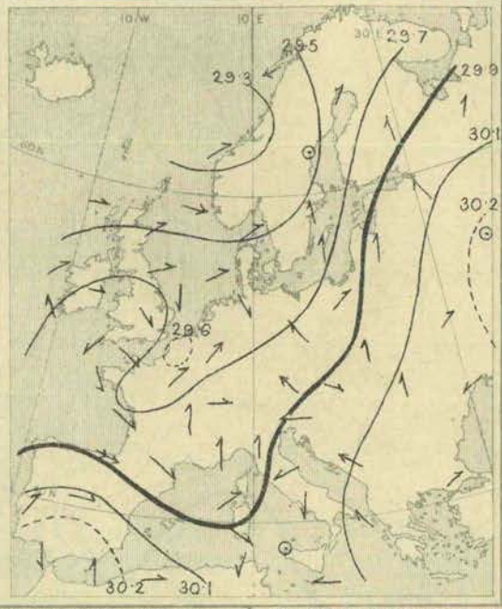
Barometer highest, 30·3 ins. and upwards in an anticyclone over central Russia: 29·9 ins. to 30·9 ins. and upwards over nearly the whole of southern Europe and the Mediterranean. Lowest, 28·8 ins. and less in a deep depression lying off the north-east of Scotland; 29·2 ins. and less in another disturbance approaching our south-west coasts. Gradients rather steep in most parts of western Europe. Scotch depression subsequently travelling away to the northward; disturbances in south-west advancing over the south of England in evening, but filling up quickly during night.

Tuesday, 28th February.

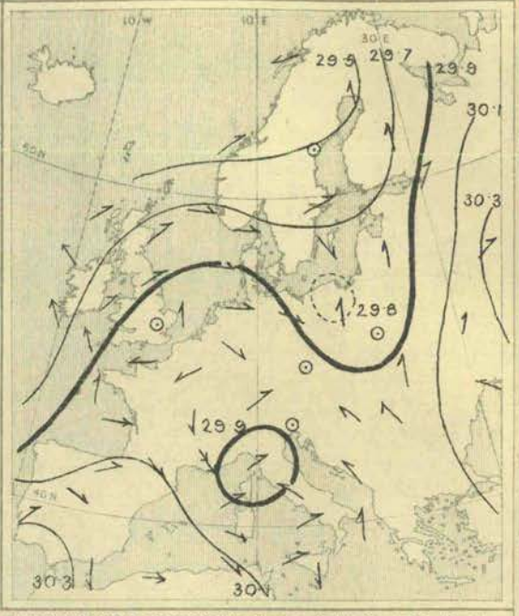
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over Russia and south-eastern Europe, as well as over nearly the whole of the United Kingdom and Brittany; cloudy or overcast in other places, with rain in several parts of France (including the Riviera) and at Cuxhaven and Copenhagen. Rain setting in later over the western parts of the United Kingdom, and spreading to nearly the whole of western and north-western Europe—falls heaviest (0·6 in. to 0·8 in.) at mouth of St. George's Channel, at Nice, Monaco, and over Italy and the northern extremity of the Adriatic.

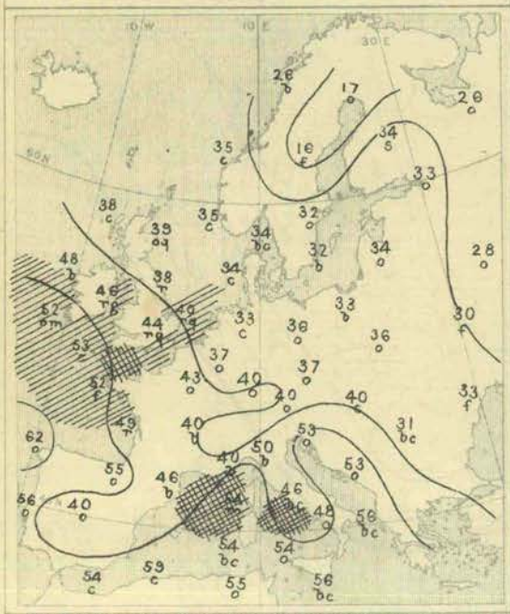
Temperature highest, 60° at Malta, 59° and more over the southern, western, and eastern shores of the Mediterranean, and on the Spanish and Portuguese coasts generally; above 40° over France, western Germany, and the extreme south-west coasts of England, below 40° elsewhere. Lowest, 13° at Archangel, 20° to 21° in the north of Scandinavia, 25° at Kharkov, 28° at Moscow, 29° at St. Petersburg and Hangö, 30° at Neufahrwasser. Rising later to 70° and more over Algeria and Sicily, 61° at Perpignan, and to between 50° and 53° on the south-western coasts of our Islands, but not touching 45° in the north-east and east.

Wind Westerly to Southerly over nearly the whole of continental Europe, but moderate Northerly over the south of England and the Channel, and blowing a gale from West-North-West at Biarritz; strong Southerly over north-west Germany and a cyclonic circulation, fresh in force, prevailing over the northern parts of the Mediterranean. Strong Southerly winds setting in on our western coasts later, and spreading to the more eastern parts of the Kingdom at night, but the Southerly wind in Germany dying down.

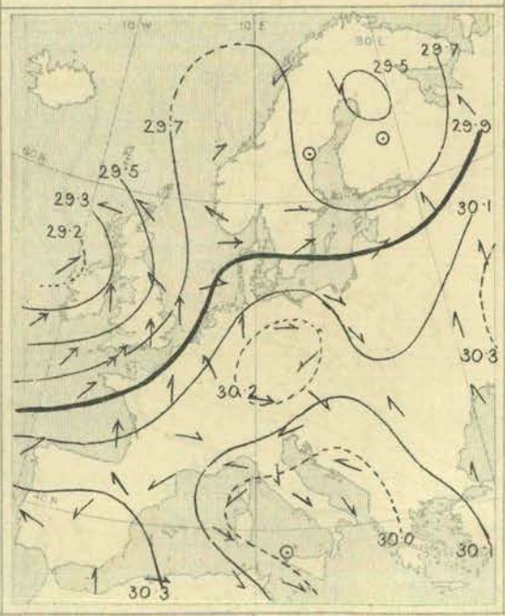
Barometer highest, 30·2 ins. and more to 29·9 ins. (1) over Russia and south-eastern Europe, (2) over the Iberian Peninsula; exceeding 29·8 ins. in a badly developed "ridge" spreading northwards across England and Ireland. Lowest, 29·3 ins. and less in a depression over the west of Norway and the Atlantic, 29·8 ins. and less off the west of Ireland, and 29·7 ins. in a small depression near Marseilles. Northern depression dispersing later—new one approaching Ireland from the south-westward, and that over the Mediterranean growing deeper and larger.

Wednesday, 1st March.

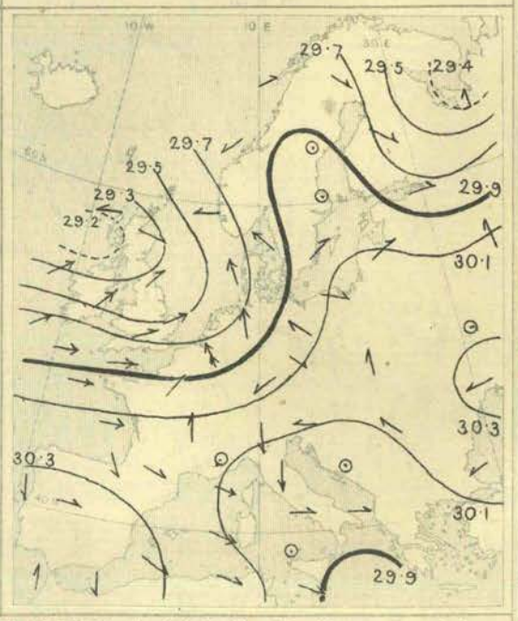
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine over the Mediterranean, the south of Scandinavia, and north Germany, foggy over several parts of south-eastern Europe, cloudy or overcast elsewhere. Very wet, squally, and unsettled over the British Islands and their neighbourhood, rainy in France, and dull over Russia, with snow in places. Considerable rain over the British Islands and north-western Europe later, and snow on our north-east coasts; heavy falls of rain at Biarritz and Charleville, and considerable amounts at Münster and Fanö.

Temperature risen decidedly over the north-western and western countries. Morning readings 62° at Corunna, and above 50° at many of the Adriatic and Mediterranean stations, as well as on the Atlantic coasts of Europe. Below 40°, however, in the north and north-east of our Islands and over central Europe, and lowest of all, 16° to 17° Fahr. on the northern coasts of Sweden, 26° at Bodö and Archangel, 28° at Moscow, and 30° at Kiev. Rising later to 50° or more over nearly the whole of England and Ireland (59° at Cambridge), exceeding 60° in the south of France (67° at Perpignan) and in Italy, touching 70° in some parts of Algeria, and 73° at San Fernando.

Wind very light and variable over the inland parts of the Continent, but (1) strong to a gale from South-West over Brittany, the Channel, and south of our Islands, strong from South and South-East in the northern parts of England and Ireland, moderate Southerly to Easterly in Scotland: (2) Westerly to Southerly, moderate to strong, over the Baltic, North-North-Westerly, light, at Haparanda, South-South-Easterly at St. Petersburg and Archangel. Veering Westwards over England later, and still blowing hard; a gale from the Eastward at Aberdeen during the afternoon, and from the Southward on the eastern shores of the North Sea in the evening.

Barometer highest, 30·3 ins. and more to 30·1 ins. over Spain, the south-west of France, and central and western Russia; 30·2 ins. to 30·1 ins. over Germany and Austria. Lowest, 30·0 ins. and less in a large shallow depression over Italy, Sardinia, and Sicily; 29·5 ins. and less in another near Ulealeborg; and 29·2 ins. and less in a third off the north-west of Ireland. Latter system spreading eastwards across Scotland and the north of England later.

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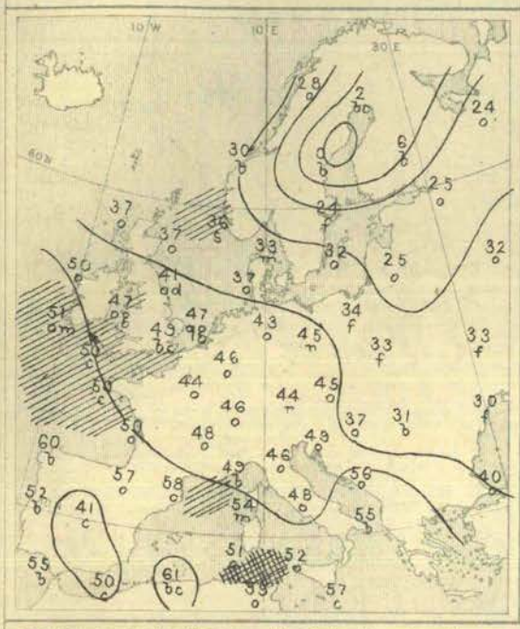
III.—SUMMARY OF WEATHER OVER EUROPE.

Thursday, 2nd March.

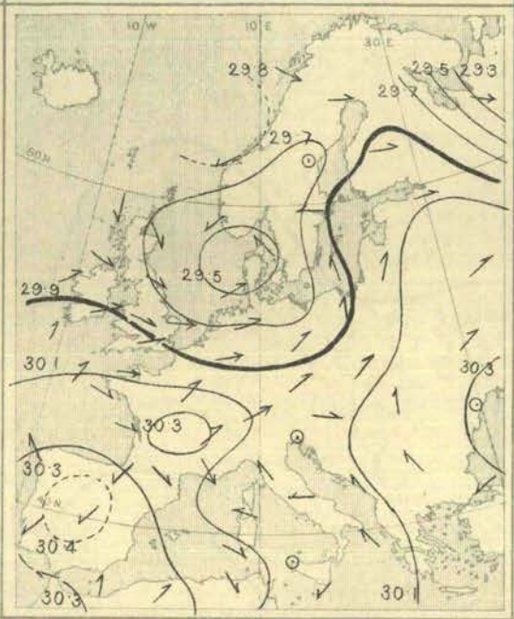
Temperature and Weather.

8 a.m.

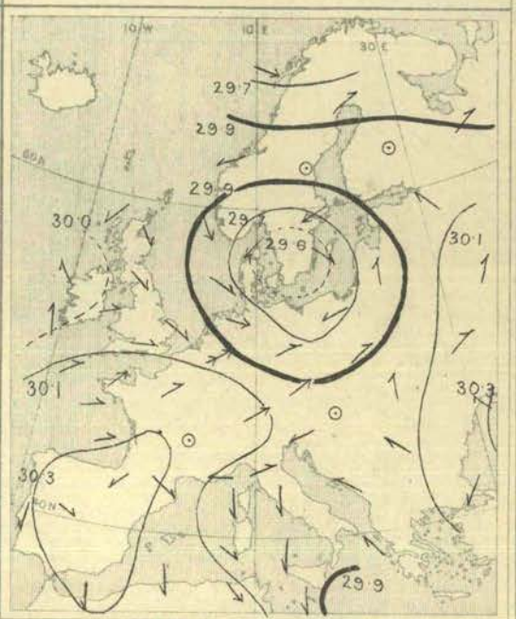


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning fine over the Peninsula and northern parts of Sweden, changeable over England, cloudy or overcast and unsettled over the north-western and central countries generally; rain falling over north Germany, and locally in several parts of the United Kingdom. Rain reported later at nearly all stations over Ireland, England, and neighbourhood, as well as north Germany and Austria, snow in Sweden, but amounts not large in our Islands (largest 0·3 in. at Mullaghmore). Exceedingly heavy falls at Lemberg and Pesaro.

Temperature fallen rapidly over northern Europe, risen somewhat over central and western countries. Morning readings, 61° at Algiers, 60° at Corunna, and exceeding 50° over the south and south-west coasts of Europe and the British Islands; exceeding 40° over France and central Europe. Lowest, − 3° Fahr. at Uleaborg, 0° at Hernösand, + 2° at Haparanda, 6° at Kuopio, 25° at St. Petersburg, 30° at Riga. Rising to 50° and more almost all over Ireland, England, and France later, and touching 57° at Oxford, Cambridge, and Paris, 63° at Nice and Biarritz, and 67° at Perpignan, and in several parts of Italy, 70° and more in the southern parts of Spain, and at Algiers and Tunis.

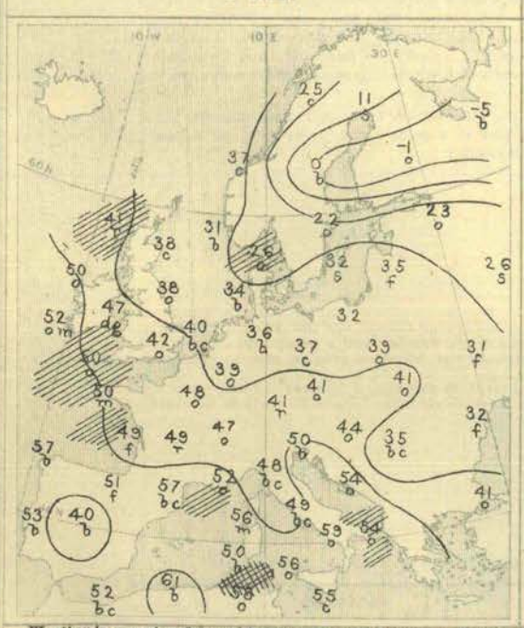
Wind (1) very variable over eastern and south-eastern Europe, as well as over the Iberian Peninsula; (2) strong Westerly over England, South-Westerly over the Netherlands, Southerly over north Germany, Easterly (light) in the west of Norway; (3) blowing hard from the Westward over the White Sea. Falling light over England later, and becoming Southerly at our western stations, without increase of force; coming on strong from the Northward in Denmark, remaining anticyclonic over Spain.

Barometer highest, (1) 30·4 ins. and more to 30·1 ins. over Spain and the southern half of France; (2) 30·3 ins. and more to 30·1 ins. over south-eastern Europe, with the southern half of Russia. Lowest, (1) 29·3 ins. and less in a deep depression over the north-east of Russia; (2) 29·5 ins. and less in another over the eastern side of the North Sea. Rising over the United Kingdom and the North Sea later—quickly in the north and east of our Islands—as the depression over the North Sea moved eastwards to the south of Sweden. Rising rapidly over northern Russia also.

Friday, 3rd March.

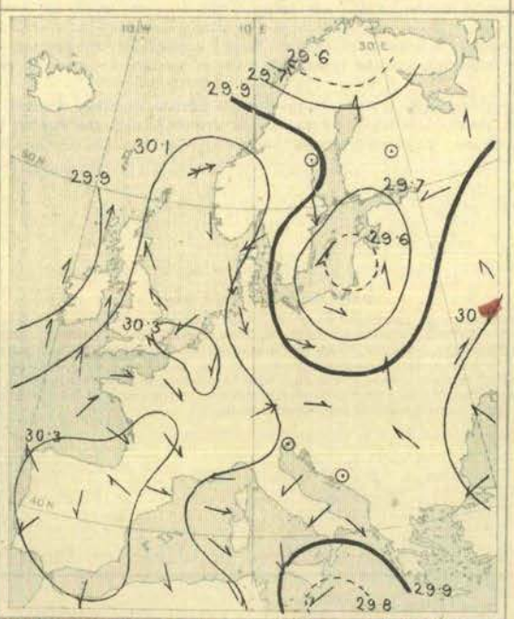
Temperature and Weather.

8 a.m.

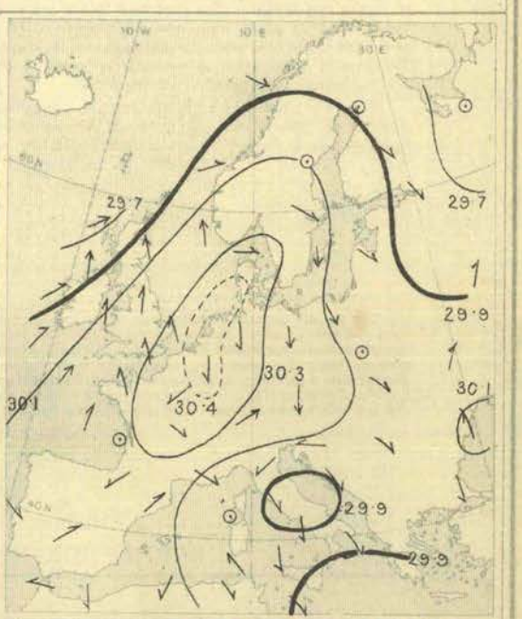


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning fine and bright over south-western Europe and the northern and western parts of the Mediterranean, as well as on the eastern shores of the North Sea, cloudy or overcast elsewhere, and very unsettled. Rain falling over the Baltic Provinces and at several of our own western stations, snow over the Baltic, north Germany, and central Russia. Rain falling in small quantity later over all but the south-eastern parts of our Islands, snow over Russia and central Europe—heavy in places—but weather very fine over the south of France, in Denmark, and in Norway.

Temperature changing irregularly—rising decidedly in some regions, but falling in some. Morning readings, 61° at Algiers, and exceeding 50° at the Mediterranean and Spanish stations as a whole, as well as at Brest, Scilly, and in some parts of Ireland. Above 40° over Austria-Hungary, France, and the greater part of England, lower elsewhere. Lowest, − 5° Fahr. at Archangel, − 1° at Kuopio, 0° at Hernösand, + 5° at Helsingfors, 32° at Swinemünde, 35° to 39° over the northern and north-eastern parts of Great Britain. Rising later to 56° at Parsonstown, and to between 63° and 68° in the south of France, Italy, and at Lisbon, and exceeding 70° at several Spanish and Algerian stations. Not touching 50° in Germany (except at Carlsruhe).

Wind very variable—light and anticyclonic over south-western Europe, light and Southerly over central Russia. Cyclonic elsewhere—(1) moderate to fresh from the Southward at our western and northern stations, moderate South-Easterly over England; (2) strong Northerly over the south of Sweden and on the eastern shores of the North Sea, moderate North-Westerly to Westerly over north Germany, light Southerly over the Baltic Provinces, Easterly to North-Easterly over the Gulf of Finland; (3) mainly Northerly (North-East to North-West) over the Mediterranean, and blowing a moderate gale at Palermo. Increasing winds from South and South-West at our western and northern stations later and from South at Skudesnaes.

Barometer highest, (1) 30·3 ins. and more in an anticyclone over the Spanish Peninsula, and exceeding 30·2 ins. in a long ridge extending thence in a northerly direction over France, England, and the North Sea to the Shetlands and west of Norway; (2) 30·2 ins. and more to 30·1 ins. over southern Russia. Lowest, 29·6 ins. and less in a depression over the Baltic, and below 29·9 ins. off our extreme north-west coasts; below 29·8 ins. in another depression having its centre near Malta. Falling decidedly in the north-west of our Islands later, rising fast over Denmark. Spanish anticyclone moving north-eastwards.

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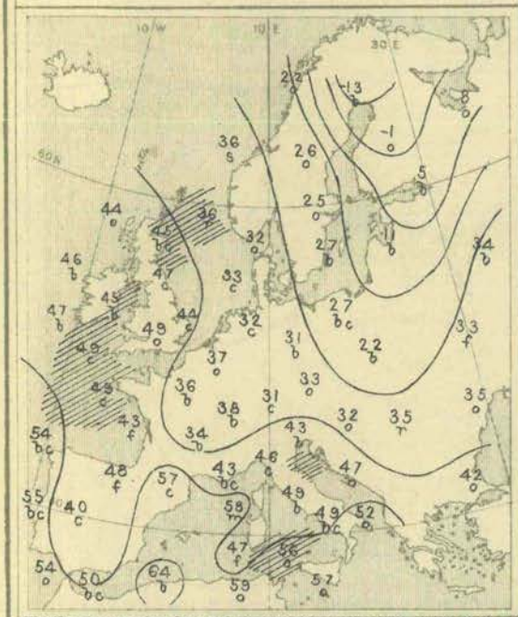
III.—SUMMARY OF WEATHER OVER EUROPE.

Saturday, 4th March.

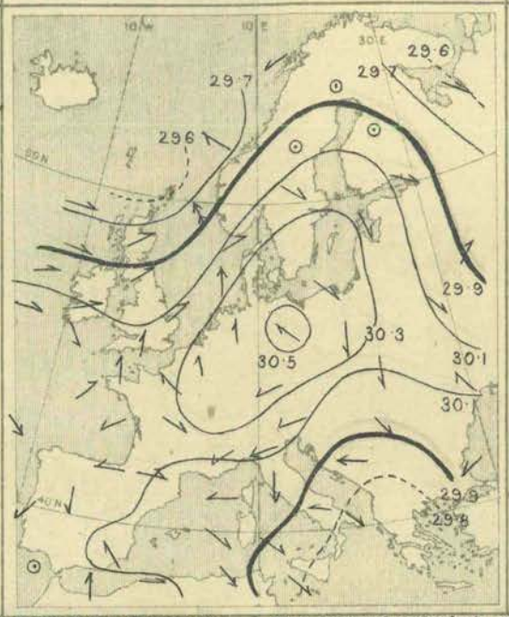
Temperature and Weather.

8 a.m.

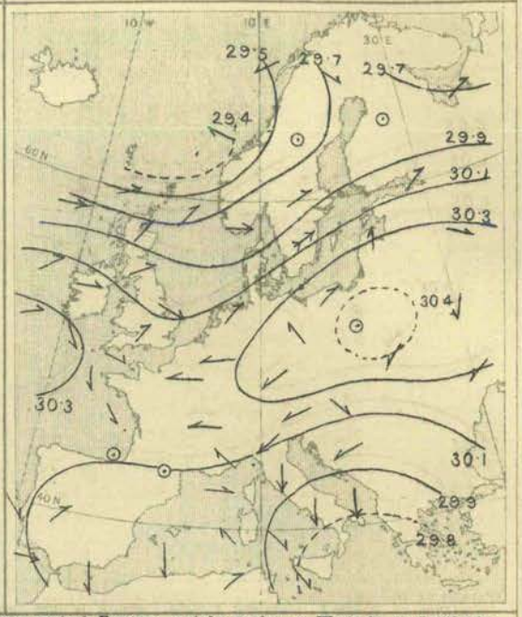


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning fine and bright over Italy, and at most of the Mediterranean, Spanish, and Portuguese stations, also over all the western parts of the United Kingdom, as well as over the Baltic, the Baltic Provinces, and Prussia. Very changeable elsewhere, with rain in several parts both of south-eastern and north-western Europe, snow at Christiansund. Some rain later over the north-western and northern parts of our Islands and on the eastern side of the North Sea, snow over portions of the Baltic and northern Russia; a very slight shower or two in the south-east of England.

Temperature fallen decidedly over central Europe, changed fitfully elsewhere. Morning readings, 64° at Algeria, and exceeding 50° over Algeria, southern and south-western Europe generally, exceeding 40° over the United Kingdom and western half of France. Lowest, – 13° Fahr. at Haparanda, – 1° at Kuopio, + 5° at St. Petersburg, 9° at Hangö, 22° at Warsaw, 27° on the north coast of Germany. Exceeding 50° over the greater part of our Islands and France later, and touching 60° to 65° over Italy, 68° on the eastern Spanish coasts, and 70° to 74° at some Algerian stations.

Wind light and anticyclonic over central Europe; mainly moderate, Westerly to Southerly (cyclonic), over the British Islands and North Sea, North-Westerly over the Baltic; Easterly to Northerly and strong over the northern parts of the Adriatic and Italy, North-Westerly over Tunis, Sicily, and Malta. Blowing very strongly from South-West over the Gulf of Finland later—but no very material change elsewhere.

Barometer highest, 30·5 ins. and more to 30·2 ins. in an anticyclone covering central Europe and having its centre near Berlin. Lowest, 29·6 ins. and less over the Shetlands and their neighbourhood, 29·8 ins. and less over Greece, the extreme south of Italy, and the regions lying to the eastward of Malta. Rising in our Islands later, falling over Scandinavia, as a depression approached that region from the Atlantic.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force is indicated thus: ⟫⟶ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze: and ⊙ = a calm. In the left-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail: s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Germany, Sweden, and Norway, and 7 a.m. in France, Algeria, Italy, Austria, and Russia; that for 6 p.m. is prepared from observations made at 6 p.m. in the British Islands and France, 7 p.m. in Algeria, 8 p.m. in Sweden and Norway, Germany, and Austria, and 9 p.m. in Russia, Belgium, and Italy. The time indicated in each case is the standard time for each country.

GENERAL NOTES.

During the greater part of this week the highest barometric readings were reported from the eastern and southern countries of Europe, and the lowest in the north-west and north, and a series of depressions arrived over the British Islands and their neighbourhood from the Atlantic, causing rough weather and a great deal of rain. In one of these the barometer fell to below 28·4 ins. After Thursday, however, there was a marked change, a well-defined anticyclone was developed over the Spanish Peninsula, and, moving north-eastwards, reached the northern half of France and the eastern shores of the North Sea by Friday evening. It then took an easterly course to central Europe, and a second similar system began to show itself off the south-west of Ireland, while a depression of no great depth arrived off the west of Norway. Thus, while the dominant wind currents over the northern countries were Westerly and South-Westerly, those over the south of Europe and the Mediterranean became Easterly to Northerly, and the weather over France and the southern parts of the United Kingdom improved decidedly.

BRIGHT SUNSHINE Values for the Week in addition to those found on page 50.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	13·2	?	18	?	EASTBOURNE	9·4	?	13	?
OSWALDKIRK (Yorkshire)	19·6	?	26	?	TENBY	23·6*	?	31*	?
WORKSOP	20·2	+0·8	27	+ 2	NEWQUAY	23·0	?	30	?
THURCASTON (Leicestershire)	20·2	+3·6	27	+ 5	TORQUAY	24·4*	?	32*	?
MARGATE	14·2	?	19	?	ARLEY COTTAGE (County Cavan)	20·5	?	28	?
WESTBOURNE (Sussex)	16·9*	?	23*	?	GUERNSEY	20·4*	?	27*	?
BRIGHTON	12·9	?	17	?					

The values at Westbourne, Tenby, Torquay, and Guernsey are obtained by Jordan's Photographic Recorder.

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WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; R. H. SCOTT, F.R.S., SECRETARY.
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VOL. X. No. 10.] *Third Series.* WEEK ENDING SATURDAY, 11TH MARCH, 1893. [*Price 6d.* [*Annual subscription, post paid, £1 10s. 0d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871-90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty-five years 1866-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90, only. BRIGHT SUNSHINE.—*The Mean values* employed are those for the corresponding periods in the ten years 1881-90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

	DISTRICTS. (See p. 56)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 1st, 1893. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	57	33	49·4	39·5	44·3	6 above.	27	+21	7	−27	72	+ 9	365*	+ 21
	1. SCOTLAND, EAST	60	32	52·7	40·1	46·2	8 above.	37	+24	5	−29	80	− 10	405	+ 22
	2. ENGLAND, N.E.	57	35	52·3	40·7	46·3	6 above.	36	+23	4	−27	92	+ 11	330	− 18
	3. ENGLAND, EAST	66	30	54·6	37·0	45·5	5 above.	46	+30	14	−19	130	+ 32	401	+ 7
	4. MIDLAND COUNTIES	66	26	54·6	37·5	45·8	5 above.	43	+28	13	−19	147	+ 38	369	− 13
	5. ENGLAND, SOUTH	63	28	53·9	38·2	45·8	4 above.	43	+24	11	−15	155	+ 28	308	+ 7
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	57	37	50·3	41·6	45·8	6 above.	28	+17	1	−25	112	+ 17	265	− 16
	7. ENGLAND, N.W.	56	34	49·1	41·1	45·0	4 above.	25	+13	3	−23	117	+ 28	264	− 24
	8. ENGLAND, S.W.	60	27	52·4	39·1	45·5	3 above.	37	+18	8	−13	188	+ 30	208	− 13
	9. IRELAND, NORTH	57	33	51·5	41·8	46·5	5 above.	32	+15	0	−22	157	+ 17	207	− 38
	10. IRELAND, SOUTH	58	30	53·2	42·0	47·5	4 above.	39	+16	0	−18	226	+ 22	151	− 34
	— CHANNEL ISLANDS	56	35	52·2	43·7	47·8	3 above.	41	+18	0	− 8	266	+ 57	70	− 23

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 56.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 1st, 1893. Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 1st, 1893. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of In.	10ths of In.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	6	13	4 more.	55	+ 4	11·2*	− 0·2	14	0	18	0	99	−15	16	− 3
	1. SCOTLAND, EAST	2	2	4 less.	46	+ 8	5·7	− 0·4	27	+11	35	+13	129	−24	21	− 4
	2. ENGLAND, N.E.	1	less than ½	4 less.	40	+ 4	4·5	+ 0·3	23	0	29	0	128	+ 4	20	0
	3. ENGLAND, EAST	0	—	4 less.	46	+10	5·0	+ 0·7	31	+ 6	39	+ 7	145	− 7	22	− 2
	4. MIDLAND COUNTIES	1	less than ½	4 less.	44	+ 9	4·8	− 0·3	28	+ 8	36	+ 9	143	+ 8	22	+ 1
	5. ENGLAND, SOUTH	1	less than ½	4 less.	45	+11	5·9	+ 0·4	35	+12	44	+13	140	+ 5	21	0
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	4	3	6 less.	50	+ 7	9·1	− 2·5	20	− 1	26	− 1	130	+ 8	21	+ 2
	7. ENGLAND, N.W.	2	1	4 less.	45	+ 6	6·1	− 0·4	20	+ 2	26	+ 3	110	−17	17	− 3
	8. ENGLAND, S.W.	1	1	6 less.	44	+ 4	8·5	− 0·1	30	+ 6	38	+ 5	171	+11	26	+ 2
	9. IRELAND, NORTH	3	1	5 less.	50	+ 5	7·2	0·0	12	− 7	16	−10	122	− 9	19	− 2
	10. IRELAND, SOUTH	2	less than ½	7 less.	46	+ 4	8·4	− 0·2	21	− 3	27	− 4	139	−23	22	− 3
	— CHANNEL ISLANDS	1	1	4 less.	51	+ 6	7·2	+ 0·2	41	+ 3	52	+13	180	−18	27	− 3

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather during this period was fine, mild, and spring-like in nearly all parts of our Islands. In the north and north-west of Scotland, however, it continued unsettled and some heavy rain was experienced.

Temperature was decidedly above the mean, the excess ranging from 3° in the Channel Islands and England S.W., to as much as 5° or 6° in most other districts, and to 8° in Scotland E. The highest of the maxima were registered on the 8th, when the thermometer rose to 66° in England E. and the Midland Counties, and to 63° in England S., while in other districts the maxima ranged from 60° in Scotland E. and England S.W. to 56° in England N.W. and the Channel Islands. The lowest of the minima were recorded towards the end of the week, and ranged from 37° in Scotland W. and 35° in England N.E. and the Channel Islands, to 28° in England S., 27° in England S.W., and 26° in the Midland Counties. The diurnal range of temperature was large generally, especially during the latter half of the week.

Rainfall exceeded the mean in Scotland N., but showed a great deficit in all other districts. Over the greater part of England and Ireland the fall was less than five-hundredths of an inch.

Bright Sunshine was more prevalent over the Kingdom generally than it has been for many weeks past, and exceeded the mean in nearly all districts. The percentage of the possible duration ranged from 16 in Ireland N., and 18 in Scotland N., to 39 in England E., 44 in England S., and 52 in the Channel Islands.

Barometer and Wind.—During the whole of this week pressure was high in the south and south-west, while some large depressions moving eastwards in the extreme north caused frequent changes in the height of the barometer on our northern coasts, and occasional strong winds and gales from the Westward. Over the more southern parts of the Kingdom light winds were prevalent, chiefly from a Westerly point. At the end of the week the anticyclonic area was moving south-eastwards, and the winds in our Islands showed some tendency to back to the South-Westward or Southward.

* This value has been altered owing to the receipt of further information.

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II.—DATA from which the SUMMARY on page 55 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°				Inches	Inches.				
0. SCOTLAND, N.	Sumburgh Head	49	33	46·4	36·4	41·3	+ 3·2	12	22	7	0·91	+0·23	*	*	*	*
	Stornoway	51	35	49·9	40·6	45·1	+ 5·7	28	4	6	0·63	−0·26	20·9	+ 0·4	27	+ 2
	Wick	54	34	50·4	39·3	44·7	+ 5·8	30	8	6	0·49	−0·01	*	*	*	*
	Lairg Ⓢ	51	36	49·7	39·7	44·5	+ 6·9	27	6	7	0·70	−0·02	*	*	*	*
	Glencarron Ⓢ	50	35	47·5	38·8	43·0	+ 5·4	20	9	6	4·00	+2·60	*	*	*	*
	Fort Augustus Ⓢ	57	37	52·2	40·1	46·0	+ 8·2	36	5	6	0·46	−0·28	6·8	?	9	?
	Fort William Ⓢ	53	39	49·4	41·9	45·5	+ 5·7	25	0	6	1·73	+0·19	13·6	?	18	?
1. SCOTLAND, E.	Nairn	59	35	54·3	40·3	47·1	+ 8·0	43	5	3	0·16	−0·22	*	*	*	*
	Aberdeen	60	37	53·6	41·4	47·3	+ 7·9	40	2	4	0·22	−0·36	32·5	+ 9·7	42	+12
	Braemar Ⓢ	53	32	48·5	37·5	42·8	+ 7·0	25	13	2	0·27	−0·31	30·7†	?	40†	?
	Ochtertyre Ⓢ	59	34	54·6	39·6	46·9	+ 8·4	44	7	2	0·11	−0·59	*	*	*	*
	Leith	58	38	54·0	42·3	48·0	+ 7·2	42	0	1	0·06	−0·26	*	*	*	*
	Marchmont Ⓢ	56	36	51·3	39·6	45·3	+ 7·3	33	7	1	0·11	−0·47	22·0	?	29	?
2. ENGLAND, N.E.	Alnwick Castle	—	—	—	—	—	—	—	—	1	0·02	−0·50	*	*	*	*
	Durham	57	35	53·7	40·5	46·9	+ 7·6	41	4	1	0·01	−0·44	24·2	+ 3·3	31	+ 3
	Shields	56	37	53·0	42·0	47·3	+ 7·2	37	0	1	0·01	−0·39	*	*	*	*
	Scarborough Ⓜ	55	35	51·4	39·7	45·4	+ 5·0	33	6	1	0·01	−0·39	*	*	*	*
	York	57	36	53·7	41·1	47·2	+ 7·1	40	3	1	0·03	−0·37	? 17·6	?− 2·2	? 23	?− 2
	Spurn Head	57	37	49·6	40·1	44·7	+ 4·8	27	5	0	—	−0·30	*	*	*	*
3. ENGLAND, E.	Hillington Ⓜ	61	30	54·2	36·3	45·0	+ 4·5	45	16	0	—	−0·40	24·2	+ 2·0	31	+ 3
	Yarmouth	57	33	52·0	38·3	45·0	+ 5·6	37	10	1	0·01	−0·42	*	*	*	*
	Geldeston	61	31	54·7	37·4	45·8	+ 5·2	46	13	0	—	−0·37	27·8	+ 3·0	35	+ 4
	Cambridge	66	31	57·6	36·7	46·8	+ 6·0	56	15	0	—	−0·32	34·7	+11·4	44	+14
	Rothamsted	61	30	54·3	36·4	45·1	+ 5·1	45	16	1	0·01	−0·39	36·4	?	46	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	59	36	54·0	40·1	46·8	+ 6·2	42	5	1	0·03	−0·37	*	*	*	*
	Loughborough	63	35	55·6	40·1	47·8	+ 6·8	49	5	1	0·02	−0·35	*	*	*	*
	Stamford (Ketton Hall)	66	30	56·6	36·0	46·0	+ 4·9	53	17	1	0·02	−0·26	*	*	*	*
	Cheadle Ⓜ	57	34	51·4	38·5	44·8	+ 5·3	34	10	3	0·15	−0·45	*	*	*	*
	Churchstoke Ⓜ	59	32	54·2	36·6	45·1	+ 5·3	44	15	2	0·03	−0·46	33·6	+12·4	43	+15
	Hereford Ⓜ	64	31	55·9	37·4	46·4	+ 4·7	50	13	1	0·01	−0·39	*	*	*	*
	Cirencester	61	26	53·7	33·4	43·3	+ 2·6	45	24	1	0·02	−0·49	29·5	+ 6·4	37	+ 8
	Oxford	61	32	55·3	37·6	46·4	+ 5·4	49	12	0	—	−0·39	33·6	+11·4	43	+14
5. ENGLAND, S.	London	60	32	55·6	37·4	46·2	+ 4·4	49	13	1	0·01	−0·34	25·3†	+ 9·1†	32†	+12†
	North Foreland	58	35	53·4	40·1	46·6	+ 5·7	40	5	0	—	?	*	*	*	*
	Strathfield Turgiss Ⓜ	60	28	55·5	36·9	45·9	+ 4·8	49	14	2	0·08	−0·32	*	*	*	*
	Dungeness	57	32	52·6	36·7	44·4	+ 3·3	39	15	0	—	−0·40	*	*	*	*
	Hastings (St. Leonards)	58	37	53·8	40·0	46·7	+ 4·8	41	6	0	0·02†	−0·41	36·3	+ 8·0	46	+11
	Southampton	63	31	57·1	38·7	47·6	+ 5·0	53	9	0	0·01†	−0·47	39·0	+13·8	49	+17
	Hurst Castle	58	32	53·1	38·4	45·5	+ 3·6	40	10	0	0·02†	−0·41	*	*	*	*
	Stowell Ⓜ	53	30	50·0	37·7	43·7	+ 2·9	30	12	3	0·12	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	53	38	50·2	41·5	45·7	+ 4·9	28	1	7	0·22	−0·63	*	*	*	*
	Glasgow	53	38	50·1	41·9	45·9	+ 6·0	28	0	2	0.12	−0·48	14·4	− 2·4	19	− 2
	Ardrossan	52	39	48·7	41·6	45·1	+ 4·2	23	1	4	0·12	−0·45	*	*	*	*
	Glenlee Ⓢ	57	37	51·9	41·3	46·3	+ 7·5	33	2	3	0·20	−0·68	*	*	*	*
	Douglas (Isle of Man)	52	37	50·5	41·5	45·9	+ 4·7	29	1	2	0·16	−0·51	25·5	+ 1·0	33	+ 2
7. ENGLAND, N.W.	Newton Reigny	54	37	51·0	39·5	45·1	+ 6·3	32	7	1	0·03	−0·49	28·2	+ 7·6	36	+10
	Stonyhurst	49	38	47·2	40·8	43·9	+ 4·0	18	3	4	0·12	−0·68	18 5	− 1·7	24	− 2
	Blackpool Ⓜ	49	40	46·9	41·4	44·0	+ 3·2	17	2	2	0·09	−0·41	17·1	− 2·7	22	− 3
	Manchester	56	34	49·9	39·5	44·6	+ 4·6	29	7	4	0.08	−0·49	13·5 †	?	17†	?†
	Liverpool Obsy. (Bidston)	52	37	48·9	41·3	45·0	+ 3·9	24	2	2	0·11	−0·27	*	*	*	*
	Llandudno Ⓜ	52	40	49·3	42·3	45·7	+ 3·0	26	0	2	0·20	−0·27	24·7	+ 4·7	32	+ 7
	Holyhead	53	41	50·6	42·6	46·5	+ 3·8	32	0	2	0·13	−0·41	*	*	*	*
8. ENGLAND, S.W.	Llandovery	60	27	54·1	35·4	44·5	+ 2·5	45	18	2	0·09	−0·76	*	*	*	*
	Pembroke	51	40	48·9	43·1	45·9	+ 3·2	27	0	2	0·09	−0·49	25·6	− 0·6	32	− 2
	Arlington (N. Devon)	55	29	50·4	36·3	43·1	+ 2·3	32	16	2	0·19	−0·71	*	*	*	*
	Cullompton Ⓜ	60	28	54·0	37·2	45·4	+ 3·6	44	13	1	0·01	−0·61	27·9	+ 3·9	35	+ 4
	Falmouth	56	37	52·1	41·4	46·6	+ 2·5	35	2	1	0·01	−0·79	34·5	+ 7·5	44	+10
	Plymouth	56	33	53·1	39·7	46·2	+ 2·5	39	6	2	0·03	−0·57	34·9	+ 7·9	44	+10
	Prawle Point	58	37	54·0	40·4	47·0	+ 4·3	42	4	0	—	−0·45	*	*	*	*
9. IRELAND, N.	Malin Head	50	39	49·0	43·3	46·1	+ 3·6	29	0	5	0·11	?	*	*	*	*
	Londonderry	57	39	51·9	41·9	46·8	+ 4·3	34	0	5	0·13	−0·49	*	*	*	*
	Edenfel (Omagh)	54	36	51·4	42·3	46·7	+ 6·1	33	0	4	0·05	−0·47	*	*	*	*
	Mullaghmore	51	40	49·4	43·9	46·6	+ 3·7	32	0	2	0·13	−0·55	*	*	*	*
	Belmullet	52	42	50·3	45·1	47·6	+ 3·4	39	0	4	0·26	?	*	*	*	*
	Markree Castle	55	34	53·3	40·2	46·6	+ 3·1	40	5	4	0·12	−0·48	11·5	− 9·2	15	− 11
	Brookeborough	54	35	52·1	39·9	45·8	+ 5·5	35	6	3	0·09	−0·56	*	*	*	*
	Armagh	56	37	52·8	40·4	46·4	+ 5·6	38	4	2	0·08	−0·42	13·1	− 6·4	17	− 8
	Donaghadee	55	38	52·6	41·3	46·8	+ 5·1	37	2	1	0·06	−0·44	*	*	*	*
	Edgeworthstown	53	33	52·1	39·6	45·7	+ 5·0	36	7	2	0·06	−0·59	*	*	*	*
10. IRELAND, S.	Dublin	56	37	54·1	43·1	48·4	+ 5·4	45	0	1	0·02	−0·46	23·9	+ 0·7	31	+ 1
	Parsonstown	56	33	53·0	40·9	46·8	+ 5·0	38	3	2	0·07	−0·43	20·5	− 2·8	26	− 3
	Kilkenny	58	30	54·3	41·0	47·5	+ 4·8	43	3	2	0·02	−0·49	*	*	*	*
	Waterford	58	31	54·4	40·2	47·1	+ 3·3	43	5	0	—	−0·71	*	*	*	*
	Roche's Point	56	38	53·7	43·6	48·5	+ 4·2	46	0	0	—	−0·90	*	*	*	*
	Valencia	53	35	51·6	43·0	47·2	+ 1·9	36	0	4	0·06	−0·94	19·2	− 7·6	24	− 9
	Killarney	54	32	53·3	42·2	47·6	+ 3·1	39	0	1	0·02	?	*	*	*	*
	Foynes	54	33	51·2	42·0	46·5	+ 3·1	32	0	2	0·04	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	53	42	51·4	45·4	48·3	+ 2·5	44	0	0	—	−0·54	*	*	*	*
	Jersey	56	35	52·9	42·0	47·3	+ 3·2	37	0	1	0·27	−0·31	40·2	+ 9·4	51	+13

Stations marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

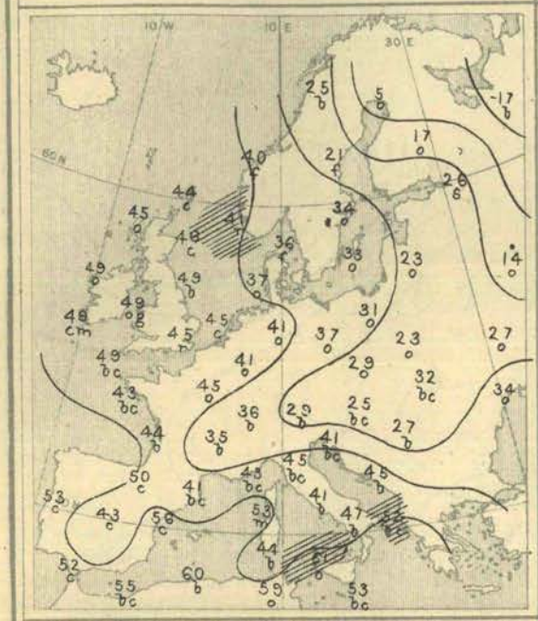
† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

† Fog or dew.

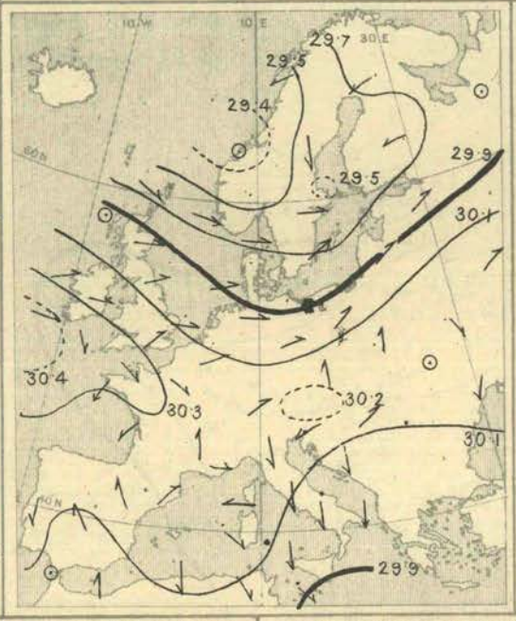
III.—SUMMARY OF WEATHER OVER EUROPE.

Sunday, 5th March.

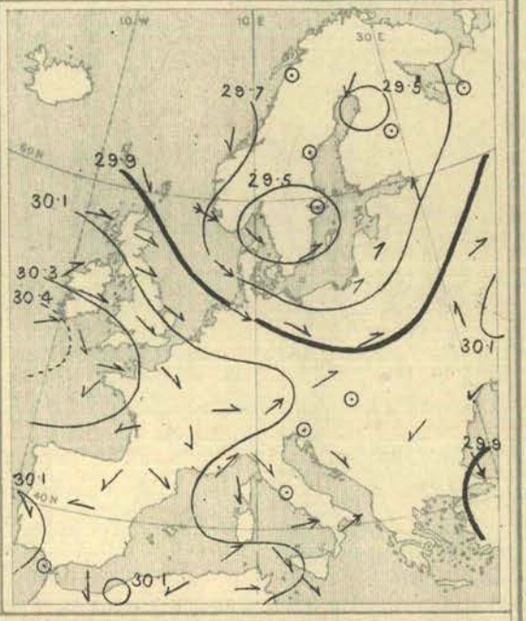
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over the Mediterranean and many parts of France and south-eastern Europe, temporarily clear in several parts of the British Islands; cloudy or overcast elsewhere, and somewhat changeable over the north-western and northern countries generally. Rain falling later in small quantities over the west and north of the United Kingdom, and in Sweden, but in larger amounts over Norway and Germany. Snow reported in many parts of northern Europe.

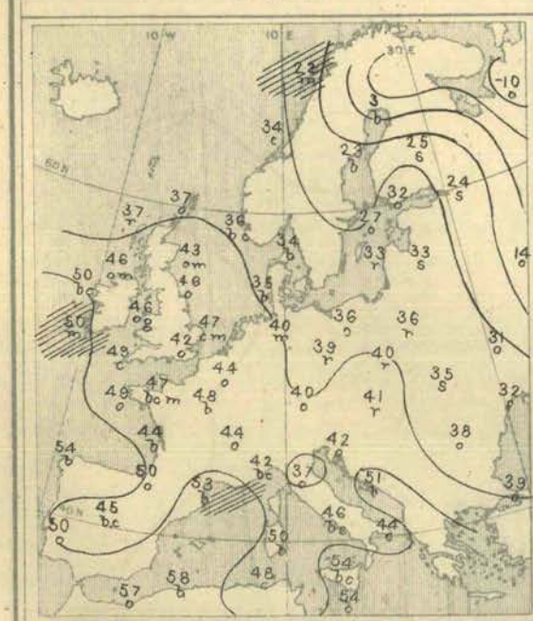
Temperature risen over Finland, Lapland, Ireland, and the north-east of France, fallen in most other places. Morning readings, 50° and more at many of the Mediterranean stations and on the coast of the Peninsula; below that value over the British Islands and east of France, and lowest of all, (1) − 11° Fahr. at Archangel, + 5° at Haparanda, 14° at Moscow, 17° at Knopio and Kharkov, and considerably below the freezing point both over Austria-Hungary and the north of Scandinavia. Rising later to between 50° and 59° over all but the extreme north-western and northern parts of the British Islands, and exceeding 60° in the west and south of France, as well as in Spain and Sicily.

Wind moderate to strong from the Westward over the United Kingdom, and from the Northward over the Bay of Biscay; moderate Westerly on the eastern shores of the North Sea, South-Westerly over the Baltic and south of Finland, very variable over northern and south-western Europe. Moderate from the Northward over Italy (strong at Brindisi) and moderate from the North-Westward at Malta. Veering to North-West later over the North Sea and the adjacent coasts, but backing to South-West in the west of Ireland.

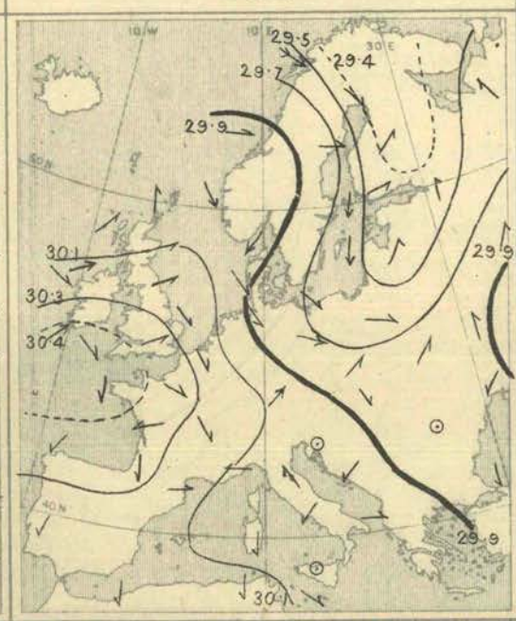
Barometer highest, (1) 30·4 ins. and more to 30·2 ins. over Ireland, the Bay of Biscay, France, and the greater part of England; (2) 30·3 ins. and more to 30·2 ins. over the southern parts of Russia; and exceeding 30·1 ins. in a "col" uniting these two high-pressure areas. Lowest, 29·4 ins. and less to 29·5 ins. over Norway, and rather below 29·7 ins. over Finland; 29·9 ins. and less over the south-eastern parts of the Mediterranean. Rising in our Islands all day, but falling over northern, eastern, and central Europe.

Monday, 6th March.

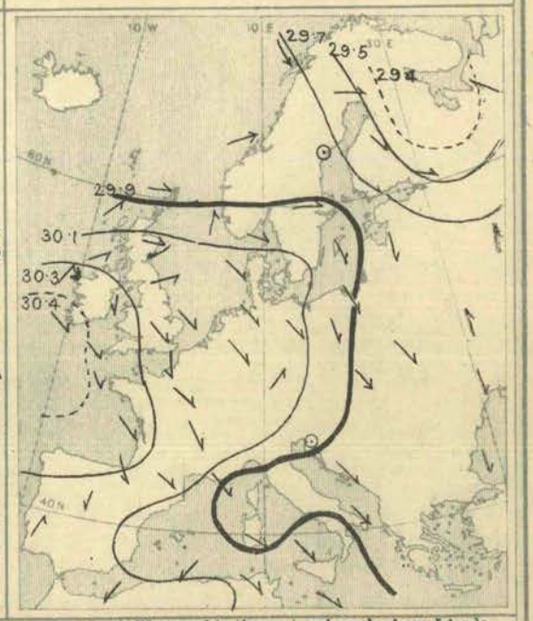
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather dull in nearly all parts of the United Kingdom, with rain on our extreme north-west coasts. Fine over the greater part of Scandinavia, Denmark, France, and southern Europe, but dull over the eastern and central countries, with rain in Poland, Germany, Austria, and the east of France, and with snow over Finland and the Baltic Provinces. A little rain falling during day in most parts of our Islands, but weather showing some improvement in the western and northern districts towards evening.

Temperature fallen a little over the United Kingdom, Scandinavia, and Denmark, but risen elsewhere. Morning readings highest, 64° at Barcelona, 58° at Algiers, and 57° at Nemours and Oran; above 50° at most of the Mediterranean and Spanish coast stations, and just reaching that point in the west of Ireland. Lowest, − 10° Fahr. at Archangel, + 3° at Haparanda, 12° at Uleaborg, and 14° at Moscow, below the freezing point over Russia and Scandinavia generally. Rising during day to 50° and upwards in nearly all parts of the United Kingdom and France, and to 60° or more over Spain, the south of France, and some parts of Italy; reaching 72° at Barcelona and Oporto.

Wind light to fresh from the Westward or South-Westward in the west and north of our Islands, but North-Westerly in the south, and Northerly or North-Easterly over the greater part of France and Spain, Westerly or North-Westerly in the north of Scandinavia, with a gale at Bodö; strong from the Northward over Denmark and the south of Scandinavia, and from the North-Westward over north Germany; light from West or South-West over eastern and southern Germany, and from the Southward at most of the Russian stations, variable in Italy, chiefly Northerly in Algeria. Veering later to the North-Westward or Northward on some parts of our western coasts, but backing to the Westward over Denmark and the south of Scandinavia.

Barometer highest, 30·4 ins. and upwards in an anticyclone lying over the extreme south-west coasts and the north-west of France. Lowest, 29·2 ins. to 29·4 ins. in a "V shaped" depression lying over Finland and the Baltic Provinces; 29·9 ins. and less in another disturbance lying to the north-westward of Scotland. Latter system subsequently travelling away to the north-eastward, and barometer rising over the more western and northern parts of our Islands. Depression over Finland moving slowly eastwards and becoming much deeper.

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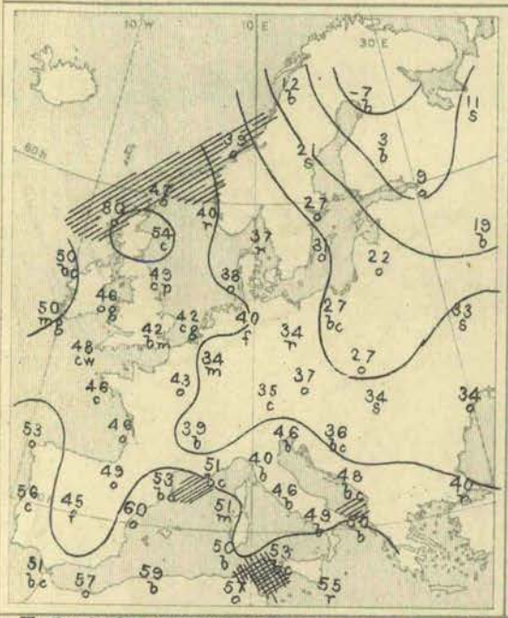
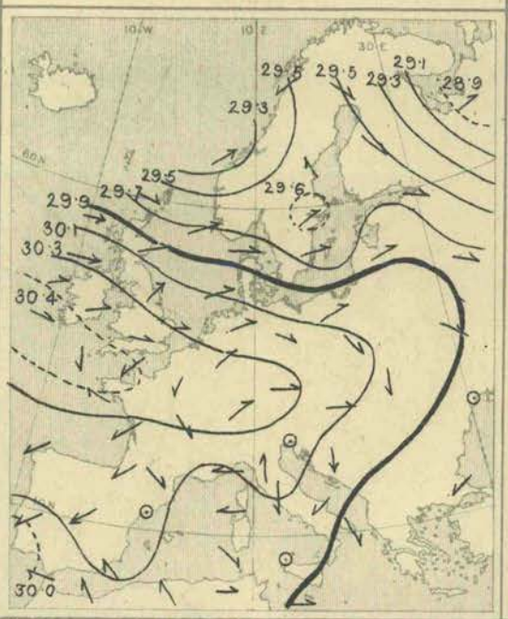
III.—SUMMARY OF WEATHER OVER EUROPE.

Tuesday, 7th March.

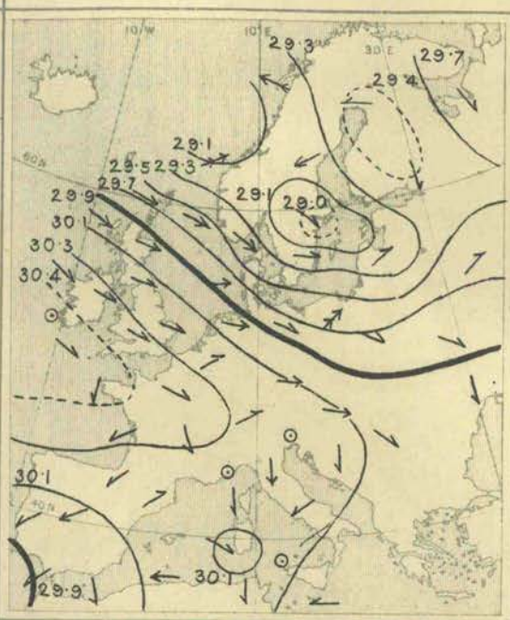
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather cloudy or overcast in all the more northern parts of the United Kingdom, with showers in the north of England. Dull also over nearly the whole of northern, eastern, and central Europe, with fog in the Netherlands, rain in the west of Norway, and snow in Sweden, as well as at Archangel, Kiev, and Lemberg. Fine and bright over Italy and the southern parts of France and Spain, but dull at most of the Algerian stations. A little rain falling during day at several of our western stations, and larger quantities in Germany.

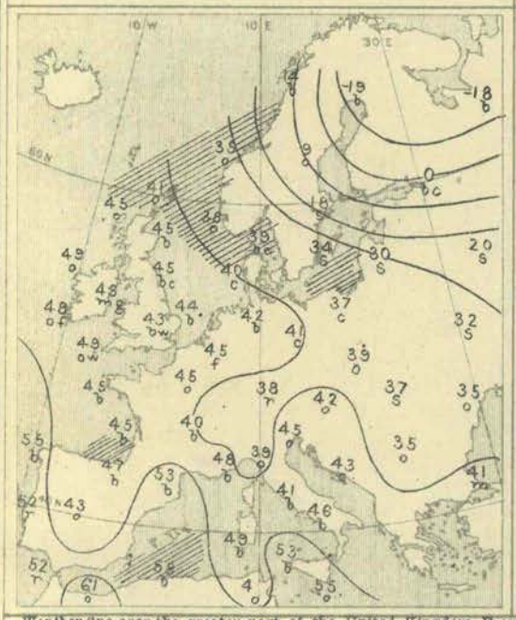
Temperature risen in the north of our Islands, as well as on the eastern shores of the North Sea, and in Italy; fallen elsewhere. Morning readings highest, 60° at Barcelona, 59° at Algiers, and 57° at Nemours and La Calle; above 50° at most of the Mediterranean and Spanish coast stations, as well as in the east of Scotland. Lowest, – 7° Fahr. at Ulleaborg, + 3° at Kuopio, 6° at Haparanda, 9° at St. Petersburg, and 11° at Archangel; slightly below the freezing point in some parts of Germany. Rising during day to 60° at Aberdeen, to 59° at Nairn, and to 55° or a little above in many isolated parts of the United Kingdom, exceeding 60° in the west and south of France, and also in Spain and Italy, the highest reading of all being 70° at Barcelona.

Wind Westerly over the greater part of our Islands and also over the northern and central parts of the Continent, but rather variable over the northern parts of Scandinavia, strong in force in the north of Scotland and the south of Norway. Light from the Northward over the English Channel, moderate from the North-Eastward in Spain and the west and south of France; Northerly in Italy and also over the south of Russia. Subsequently increasing to a moderate to strong gale from the Westward over Norway, Denmark, and the Baltic, and from North-West in the north of Scotland; no important change occurring elsewhere.

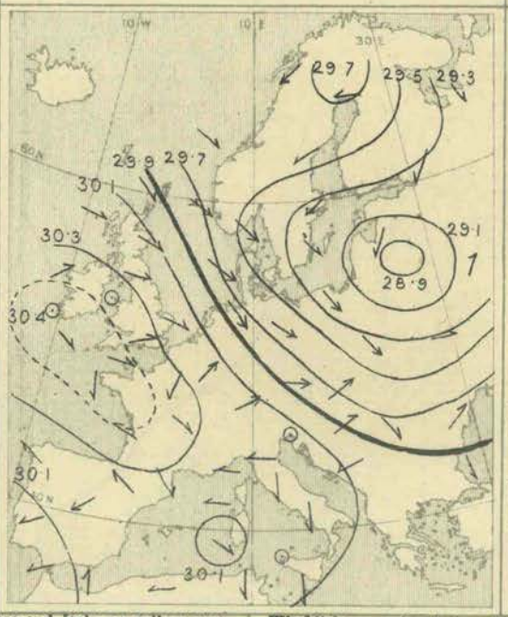
Barometer highest, 30·4 ins. and upwards over the south-west of our Islands, 30·1 ins. and upwards in a large anticyclone covering Ireland, England, the Netherlands, Germany, France, and the greater part of Spain. Lowest, 28·9 ins. and less in a depression having its centre near Archangel; 29·3 ins. and less in another disturbance lying off the west of Norway; 29·6 ins. and less in a small secondary system lying near Stockholm. Russian depression subsequently travelling away to the eastward, but disturbance near Stockholm increasing considerably in depth, and occasioning steep gradients over Norway, Denmark, and the North Sea.

Wednesday, 8th March.

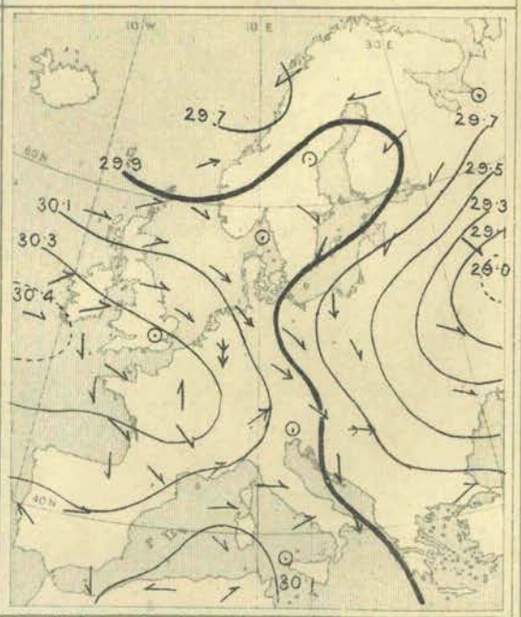
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fine over the greater part of the United Kingdom, France, and Italy, as well as over Denmark, and the northern parts of Scandinavia and Russia. Dull in the south of Scandinavia and the greater part of central and eastern Europe, with snow at several of the Baltic stations, and also at Lemberg and Kief; raining in the southern and south-western parts of the Spanish Peninsula. A little rain falling later in the north of Scotland and the extreme north-west of Ireland; weather remaining very fine over England.

Temperature fallen in most parts of the United Kingdom, as well as over Scandinavia, northern Russia, and many parts of southern Europe, risen elsewhere. Morning readings highest, 61° at Oran, 60° at Barcelona, and 58° at Algiers, above 50° on the western coasts of the Spanish Peninsula, but considerably below it in Italy and also in Tunis. Lowest, – 19° Fahr. at Haparanda, – 18° at Archangel, – 10° at Ulleaborg, and 0° zero at St. Petersburg; below the freezing point in most parts of Scandinavia and central Russia. Rising during day to 60° or more at the inland stations in England, and reaching 66° at Cambridge. Exceeding 68° in the south of France and exceeding 70° in Spain, the highest readings of all being 73° at Perpignan and 71° at Madrid.

Wind light or moderate from the South-Westward in the north of Ireland, and from West or North-Westward in most parts of the United Kingdom. Strong to a gale from North-West over Norway, Denmark, and the Baltic, and from the West or South-West in Poland and Austria. Light from South-West over the central and southern parts of Russia. North-Easterly over the northern parts of Russia and Scandinavia. Chiefly Northerly in Italy, but North-Easterly or Easterly in Spain, and South-Easterly in Algeria. Wind subsiding later in Denmark, but fresh gale from West-South-West setting in at Christiansund.

Barometer highest, 30·4 ins. and upwards in an anticyclone lying over the south-western parts of the United Kingdom and the north-west of France. Lowest, 28·9 ins. and less in a large and deep depression with its centre over the Baltic Provinces. Gradients steep over all the more central parts of Europe, with the North Sea, Denmark, and Finland. Depression over Baltic Provinces subsequently travelling away to the eastward, and brisk rise of barometer taking place over Denmark and the south of Scandinavia, new fall setting in over the western and northern parts of the United Kingdom.

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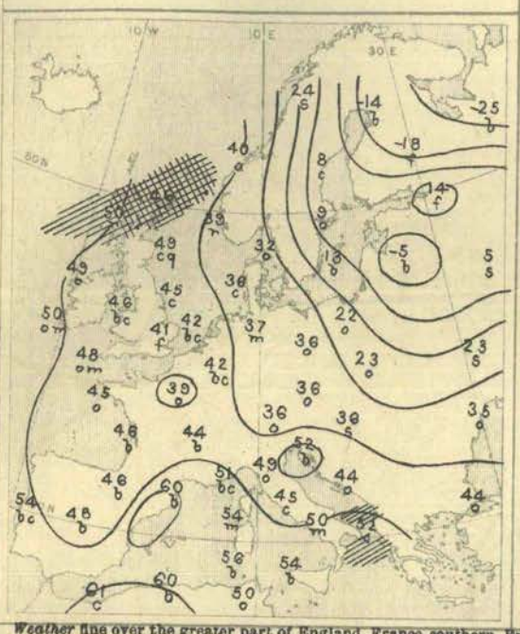
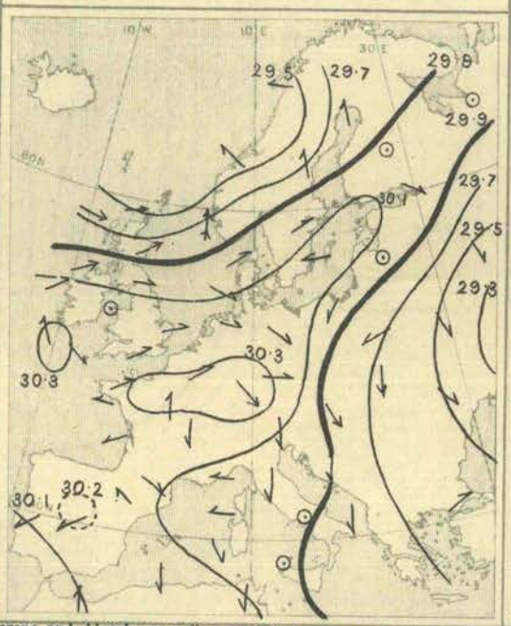
Thursday, 9th March.

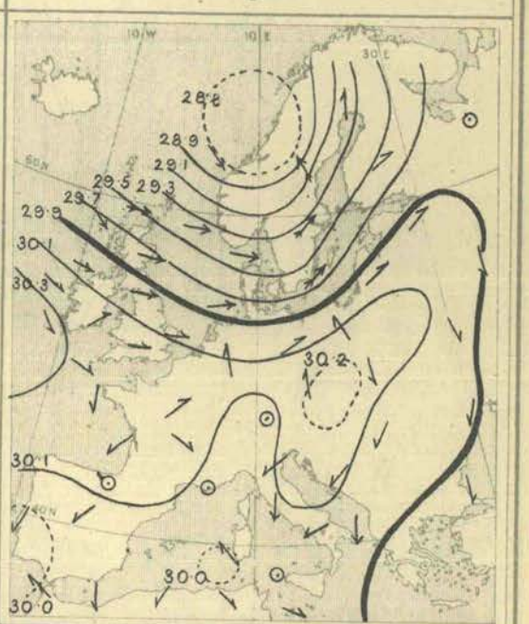
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fine over the greater part of England, France, southern Europe, and Algeria, as well as at many of the Baltic stations. Dull over Ireland, Scotland, Scandinavia, and the central and eastern parts of the Continent, rain falling in the Shetlands, Hebrides, and at Skudesnaes, and snow at Bodö, Moscow, Kiev, Lemberg, and Buda-Pesth. Showers of rain or hail falling later in the extreme north and north-west of our Islands, and heavy snow in some parts of Scandinavia.

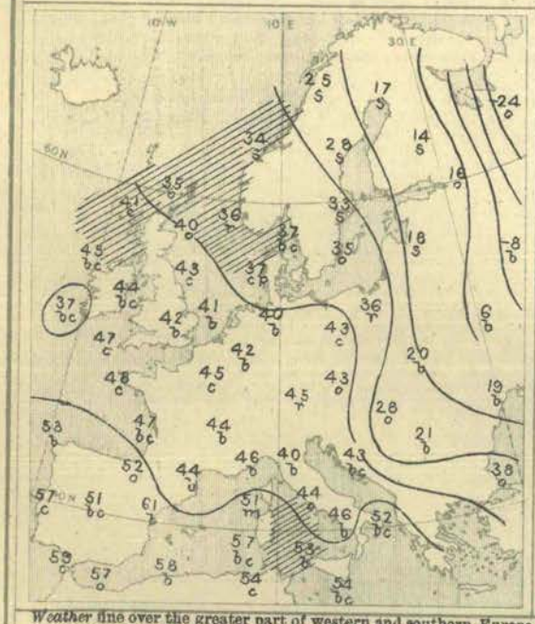
Temperature risen in the west and north of our Islands, as well as over Norway and the greater part of southern Europe, but fallen elsewhere. Morning readings highest, 68° at Barcelona, 61° at Oran, and 60° at Perpignan and Algiers; above 50° at most of the Mediterranean and Spanish coast stations, and just reaching that point in the north of Scotland and the south-west of Ireland. Lowest, — 25° Fahr. at Archangel. — 18° at Kuopio, — 14° at Haparanda, and — 13° at Uleaborg, below zero over the northern parts of Sweden and Russia generally, below the freezing point over Poland and eastern Germany. Rising during day to between 60° and 63° at some of the English stations, and to 59° even as far north as Aberdeen. Exceeding 65° in Spain and the west and south of France, and reaching 77° at Perpignan.

Wind strong from the Westward in the north of Scotland, but light or moderate from the South-Westward in most other parts of the United Kingdom, as well as in Denmark and the Netherlands, Southerly or South-Easterly in Scandinavia, with a gale at Skudesnaes. Light from the North-Eastward on the southern shores of the Baltic, and from the Northward or North-Westward over Austria, and the central and southern parts of Russia. Easterly in the west and south of France, North-Easterly in Spain, and Northerly in Italy, but Southerly at most of the Algerian stations. Subsequently increasing to a strong gale from the Westward or North-Westward in the west and north of Scotland, and from the Southward in Sweden.

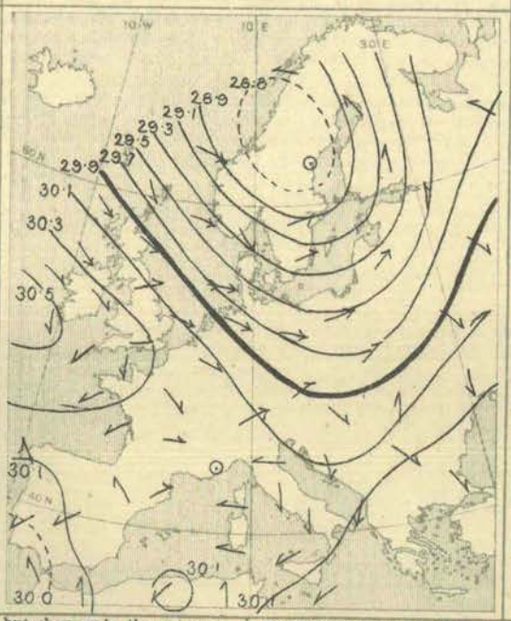
Barometer highest, 30·1 ins. to 30·3 ins. in a large anticyclone covering Ireland, England, Spain, France, Germany, and the Baltic. Lowest, 29·3 ins. and less in a depression travelling eastwards across central Russia; 29·5 ins. and less in another disturbance approaching Scandinavia from the westward. Latter system moving eastwards during day, and gradients becoming steep over all the more northern parts of our Islands and the Continent.

Friday, 10th March.

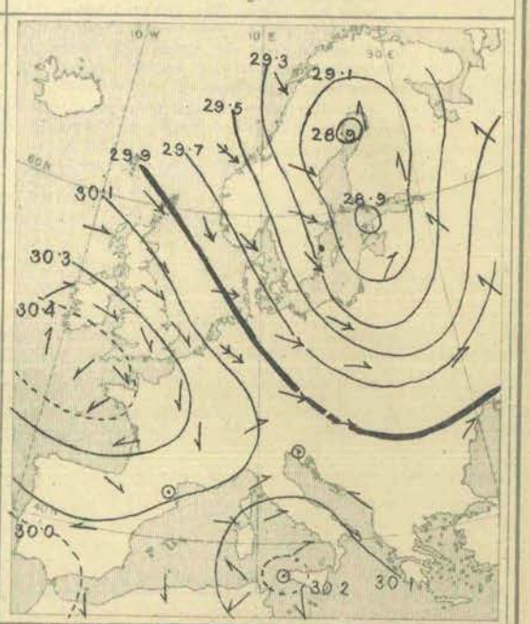
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fine over the greater part of western and southern Europe, but showery in the extreme north and north-west of our Islands, with hail at Wick. Dull and unsettled over the northern, central, and eastern countries, with snow over nearly the whole of Scandinavia, Finland, and the Baltic Provinces, and with rain at Neufahrwasser and Munich. Some improvement taking place later over Scandinavia and the north of Scotland. No important change observed elsewhere.

Temperature fallen in our Islands and Norway, as well as in Italy, Austria, and the central and southern parts of Russia, risen elsewhere—rapidly over Sweden, Finland, and the Baltic. Morning readings highest, 61° at Barcelona, 59° at San Fernando, 58° at Algiers, 57° at Lisbon, Cagliari, and Nemours. Lowest, — 24° Fahr. at Archangel, — 8° at Moscow, + 6° at Kiev and Kharkov, and 14° at Kuopio; below the freezing point in most parts of northern and eastern Europe, and below 40° in many parts of Ireland and Scotland. Rising during day to 50° or a little above in all but the extreme northern and north-western parts of the United Kingdom; exceeding 60° over the southern parts of France and Italy, and exceeding 70° in Spain.

Wind strong from the Westward or North-Westward over Norway, Denmark, north Germany, and the northern and eastern parts of our Islands, and from the South-Westward or Southward over Finland and the Baltic Provinces, with moderate to fresh gales in many places; South-Easterly or Easterly in the north of Scandinavia. Light from the Northward at the Channel stations, from the North-Eastward over the Bay of Biscay and Spain, Northerly or North-Westerly over Italy, Austria, and the south of Russia; variable in Algeria. Wind subsiding later over the North Sea and on our northern coasts, and backing to the South-Westward in the west of Ireland. Gale over Finland and the Baltic Provinces also subsiding, and wind veering to the Westward.

Barometer highest, 30·5 ins. and upwards in an area lying off the south-west of Ireland; 30·2 ins. and upwards in an anticyclone covering the greater part of Ireland, England, and France, and also in another system lying over the south of Russia. Lowest, 28·3 ins. and less in a large depression over Scandinavia; surrounding gradients steep. Depression subsequently moving eastwards and becoming rather more complex in form. New disturbance beginning to approach our western coasts in evening.

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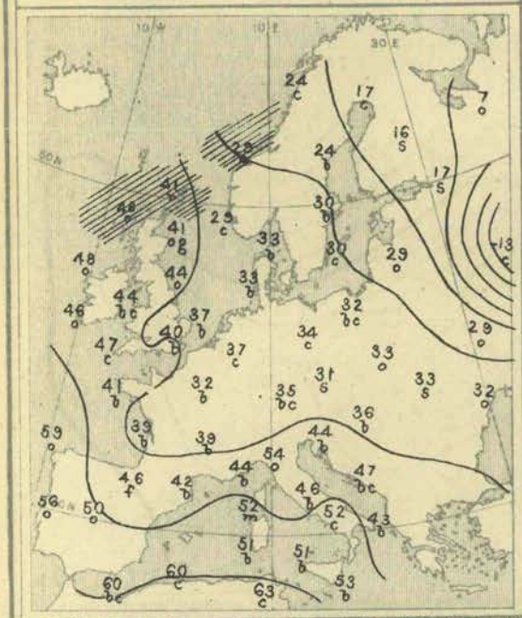
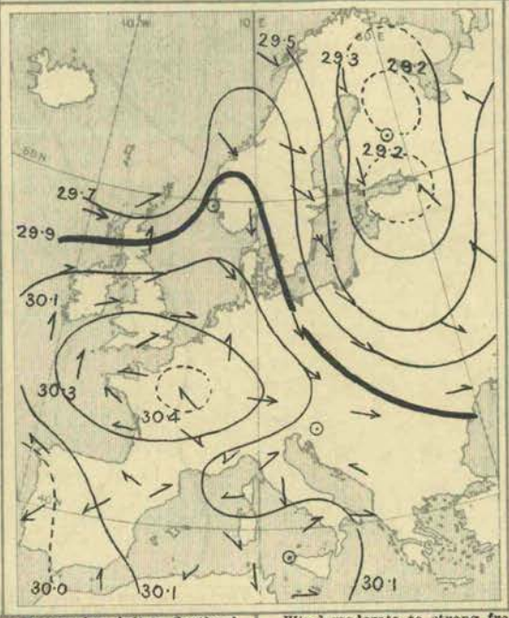
III.—SUMMARY OF WEATHER OVER EUROPE.

Saturday, 11th March.

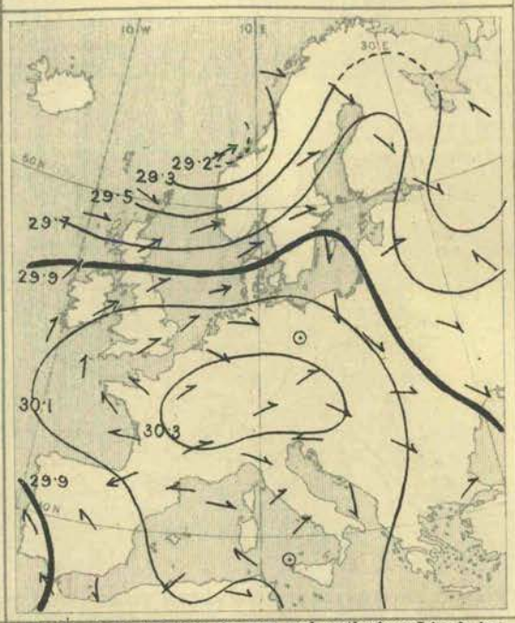
Temperature and Weather. — 8 a.m.



Barometer and Wind. — 8 a.m.



Barometer and Wind. — 6 p.m.



Weather fine and dry over the greater part of western and southern Europe, but dull in Scotland and the west and north of Ireland, with rain in the Shetlands. Dull in Russia and several parts of Germany, with snow at Kuopio, St. Petersburg, Prague, Cracow, and Lemberg. Rain falling later in Scandinavia and the north of Scotland, heavily at Christiansund. Considerable falls taking place also at some of the Spanish stations.

Temperature risen quickly in the south of Russia, and to a less extent in Austria and the west and north of our Islands, but fallen elsewhere. Morning readings highest, 63° at La Calle, 60° at Barcelona, Oran, and Algiers, and 59° at Corunna, above 50° at most of the Mediterranean stations. Lowest, – 13° Fahr. at Moscow, + 7° at Archangel, 14° at Uleaborg, and 16° at Kharkov; below the freezing point in most parts of Russia and Scandinavia, and as low as 32° at Paris. Rising during day to 55° or a little above it over the inland parts of England, and to 60° or more over southern Europe generally, the highest readings of all being 75° at Oporto and 72° at Perpignan.

Wind moderate to strong from the South-Westward in the west and north of our Islands, but North-Westerly over Scandinavia, Denmark, the Baltic, and the greater part of central Europe, with a gale at Wisby. Light from the Northward at some of the Channel stations, Easterly over the Bay of Biscay; North-Easterly in Spain and the south of France. Westerly or South-Westerly in Italy and also in the south of Russia. Subsequently veering to the Westward in the north of Scotland; increasing to a gale from South-West on the Norwegian coasts.

Barometer highest, 30·4 ins. and upwards over central France; 30·1 ins. and upwards in a large anticyclone covering Ireland, England, the Netherlands, western Germany, France, Spain, and the western parts of the Mediterranean. Lowest, 29·2 ins. and less in two small depressions lying over Finland, 29·6 ins. and less in another disturbance lying off the north of Scotland. Low pressure systems all moving eastwards later, but steady fall of barometer taking place in most parts of western Europe.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force is indicated thus: ⟿ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the left-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Germany, Sweden, and Norway, and 7 a.m. in France, Algeria, Italy, Austria, and Russia; that for 6 p.m. is prepared from observations made at 6 p.m. in the British Islands and France, 7 p.m. in Algeria, 8 p.m. in Sweden and Norway, Germany, and Austria, and 9 p.m. in Russia, Belgium, and Italy. The time indicated in each case is the standard time for each country.

GENERAL NOTES.

During nearly the whole of the week the central portion of a large anticyclone lay to the south-westward of our Islands, the borders of the system extending eastwards over Ireland, England, and France, and sometimes as far as Germany and Poland. Several large depressions advanced over Scandinavia from the westward or north-westward, and, on the 7th and 9th, strong gales from the Westward and North-Westward were experienced in the north of Scotland, as well as on the Norwegian coasts, while Southerly gales were reported over Sweden and the Baltic. The weather was rough and unsettled in all the more northern countries, with rain or snow in many places, but in the southern and south-western parts of Europe the conditions were fine and warm. Towards the close of the week the anticyclone in the south-west moved slowly eastwards, and the depressions which continued to arrive off our extreme northern coasts pursued a more northerly course, their centres travelling north-eastwards along the west of Norway. The wind over our Islands backed to the South-Westward, and unsettled weather began to spread further south, but temperature remained very high for the time of year.

BRIGHT SUNSHINE Values for the Week in addition to those found on page 56.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	23·3	?	30	?	EASTBOURNE	36·7	?	46	?
OSWALDKIRK (Yorkshire)	25·6	?	33	?	TENBY	26·1*	?	34*	?
WORKSOP	19·7	–0·1	25	– 1	NEWQUAY	25·8	?	33	?
THURCASTON (Leicestershire)	23·7	+5·7	30	+ 7	TORQUAY	37·5*	?	47*	?
MARGATE	33·4	?	42	?	ARLEY COTTAGE (County Cavan)	11·6	?	15	?
WESTBOURNE (Sussex)	41·4*	?	52*	?	GUERNSEY	41·8*	?	53*	?
BRIGHTON	33·7	?	43	?					

* The values at Westbourne, Tenby, Torquay, and Guernsey are obtained by Jordan's Photographic Recorder.

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WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; R. H. SCOTT, F.R.S., SECRETARY.
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VOL. X. No. 11.] *Third Series.* WEEK ENDING SATURDAY, 18TH MARCH, 1893. [*Price* 6*d.* [*Annual subscription, post paid*, £1 10*s.* 0*d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871-90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty-five years 1866-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90, only. BRIGHT SUNSHINE.—*The Mean values* employed are those for the corresponding periods in the ten years 1881-90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

	DISTRICTS. (See p. 62)	Observed during the Week: Highest.	Observed during the Week: Lowest.	Averages of: Daily Maxima.	Averages of: Daily Minima.	Averages of: Daily Mean.	Above or below the Mean for the Week.	Accumulated: For the Week: Above 42°	For the Week: Difference from Mean.	For the Week: Below 42°	For the Week: Difference from Mean.	From January 1st, 1893: Above 42°	From January 1st, 1893: Difference from Mean.	From January 1st, 1893: Below 42°	From January 1st, 1893: Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH -	53	16	41·8	32·4	36·9	2 below.	0	− 7	36	+ 2	72	− 1	401	+ 26
	1. SCOTLAND, EAST -	53	22	44·6	32·6	38·7	1 below.	7	− 7	35	+ 1	87	− 21	440	+ 21
	2. ENGLAND, N.E. - -	65	26	50·1	35·2	42·4	2 above.	31	+17	19	−12	123	+ 21	349	− 32
	3. ENGLAND, EAST -	65	28	52·3	36·5	44·2	3 above.	39	+20	15	−19	169	+ 54	416	− 17
	4. MIDLAND COUNTIES	66	22	52·2	36·5	44·1	3 above.	38	+18	15	−18	185	+ 51	384	− 34
	5. ENGLAND, SOUTH -	64	31	51·8	39·4	45·4	3 above.	35	+15	7	−20	190	+ 41	315	− 16
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST -	51	23	45·4	34·9	40·0	1 below.	10	− 2	26	0	122	+ 12	291	− 18
	7. ENGLAND, N.W. -	66	26	47·6	37·4	42·3	1 above.	21	+ 8	13	−14	138	+ 32	276*	− 42
	8. ENGLAND, S.W. -	64	24	51·0	40·4	45·6	3 above.	32	+12	4	−18	220	+ 42	212	− 35
	9. IRELAND, NORTH -	53	29	46·8	36·4	41·5	1 below.	13	− 3	22	− 1	170	+ 11	229	− 41
	10. IRELAND, SOUTH -	56	33	50·7	40·8	45·6	2 above.	30	+ 7	3	−16	256	+ 29	154	− 52
	— CHANNEL ISLANDS -	57	42	53·2	44·7	48·9	4 above.	48	+25	0	− 9	314	+ 81	70	− 37

Rainfall.

	DISTRICTS. (See p. 62)	For the Week: Number of Rainy Days.	For the Week: Total Fall.	For the Week: More or less than the Mean for the Week.	From January 1st, 1893: Number of Rainy Days.	From January 1st, 1893: Difference from Mean.	From January 1st, 1893: Total Fall.	From January 1st, 1893: Difference from Mean.
			10ths of In.	10ths of In.			Ins.	Ins.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH -	6	15	6 more.	61	+ 6	12·7	+ 0·4
	1. SCOTLAND, EAST -	4	2	3 less.	50	+ 8	5·9	− 0·7
	2. ENGLAND, N.E. - -	3	1	3 less.	43	+ 4	4·6	− 0·1
	3. ENGLAND, EAST -	3	1	3 less.	49	+10	5·1	+ 0·4
	4. MIDLAND COUNTIES-	3	1	3 less.	47	+10	4·9	− 0·6
	5. ENGLAND, SOUTH -	3	2	3 less.	48	+12	6·1	+ 0·2
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST -	5	5	3 less.	55	+ 8	9·6	− 2·9
	7. ENGLAND, N.W. - -	3	2	3 less.	48	+ 6	6·3	− 0·7
	8. ENGLAND, S.W. - -	4	2	5 less.	48	+ 5	8·7	− 0·5
	9. IRELAND, NORTH -	6	5	1 less.	56	+ 7	7·7	− 0·1
	10. IRELAND, SOUTH -	3	2	5 less.	49	+ 4	8·6	− 0·6
	— CHANNEL ISLANDS -	4	1	5 less.	55	+ 7	7·3	− 0·3

Bright Sunshine.

	DISTRICTS. (See p. 62)	For the Week: Hours recorded.	For the Week: Difference from Mean.	For the Week: Percentage of possible Duration.	For the Week: Difference from Mean.	From January 1st, 1893: Hours recorded.	From January 1st, 1893: Difference from Mean.	From January 1st, 1893: Percentage of possible Duration.	From January 1st, 1893: Difference from Mean.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH -	15	− 2	18	− 3	114	−22	17	− 3
	1. SCOTLAND, EAST -	35	+20	44	+22	164	−15	24	− 2
	2. ENGLAND, N.E. - -	43	+20	52	+23	171	+21	24	+ 3
	3. ENGLAND, EAST -	35	+10	43	+10	180	− 1	25	0
	4. MIDLAND COUNTIES-	36	+14	44	+16	179	+18	25	+ 3
	5. ENGLAND, SOUTH -	36	+ 9	44	+ 9	176	+14	24	+ 2
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST -	37	+15	46	+18	167	+22	24	+ 3
	7. ENGLAND, N.W. - -	32	+12	39	+13	142	− 9	20	− 1
	8. ENGLAND, S.W. - -	33	+ 5	40	+ 6	204	+13	28	+ 2
	9. IRELAND, NORTH -	24	+ 3	30	+ 2	146	− 8	20	− 2
	10. IRELAND, SOUTH -	22	− 4	26	− 7	161	−28	22	− 4
	— CHANNEL ISLANDS -	38	+ 4	46	+ 5	218	−22	29	− 3

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather continued generally fair and bright over all the more southern parts of the Kingdom, but was unsettled in the north and north-west, where rain fell frequently during the early part of the week, and sleet and snow showers later. Some snow showers were also experienced at many of our southern and eastern stations, but they were mostly very slight.

Temperature continued high during the first half of the period, but subsequently fell rapidly and became low for the time of year. The averages for the week were rather above the normal in England, as well as in Ireland S. and the Channel Islands, elsewhere they were a little below. The highest readings were registered on the 12th, when the thermometer rose to between 64° and 66° over England; in Ireland the absolute maxima ranged from 53° to 56°, and in Scotland from 51° to 53°. The lowest of the minima were recorded at the end of the week, when they ranged from 16° in Scotland N., and 22° in Scotland E. and the Midland Counties, to 33° in Ireland S., and to 42° in the Channel Islands.

Rainfall was considerably in excess of the mean in Scotland N., but less in all other parts of the Kingdom. The fall over England was very slight, not amounting to more than one or two-tenths of an inch.

Bright Sunshine was less than the mean in Scotland N. and Ireland S., but showed a decided excess elsewhere. The possible amount of duration ranged from 52 in England N.E., from 46 in Scotland W. and the Channel Islands, and from between 39 and 44 in most other districts, to 26 in Ireland S., and 18 in Scotland N.

Barometer and Wind.—During the greater part of this period pressure continued highest in the south, and depressions travelled from the westward towards Scandinavia. The winds were consequently chiefly Westerly in direction and generally moderate to fresh in force; in the more northern parts of the Kingdom, however, moderate to strong gales prevailed at times. Towards the end of the week a change occurred in the distribution of pressure, a large depression in the north spreading south-eastwards, and a new anticyclone approaching our south-western coasts from the Atlantic. With this change the winds over the United Kingdom shifted to the North-Westward and Northward, and blew with considerable strength in the north and north-west, attaining the force of a gale in places.

* This value has been altered slightly owing to the receipt of further information.

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II.– DATA from which the SUMMARY on page 61 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°				Inches	Inches.				
0. SCOTLAND, N.	Sumburgh Head ⚓	46	23	40·7	32·9	36·7	− 1·6	0	37	7	1·23	+0·61	*	*	*	*
	Stornoway	50	25	42·0	32·4	37·1	− 2·6	0	34	6	1·00	+0·13	19·6	− 2·2	24	− 3
	Wick	49	23	41·9	32·6	37·1	− 2·2	0	34	6	0·57	+0·10	*	*	*	*
	Lairg	53	16	41·0	30·7	35·7	− 2·3	0	44	6	1·19	+0·50	*	*	*	*
	Glencarron	46	21	40·8	30·7	35·6	− 2·5	0	45	6	3·68	+2·26	*	*	*	*
	Fort Augustus ⚓	49	23	43·0	32·9	37·8	− 1·5	3	32	6	1·19	+0·51	6·5	?	8	?
	Fort William ⚓	48	28	42·9	34·6	38·6	− 1·6	3	25	6	1·41	+0·01	17·6	?	22	?
1. SCOTLAND, E.	Nairn	52	23	43·3	33·0	38·0	− 1·8	4	31	5	0·46	+0·07	*	*	*	*
	Aberdeen	52	26	45·7	35·4	40·4	+ 0·7	10	25	4	0·21	−0·31	43·1	+18·3	53	+22
	Braemar ⚓	47	23	40·3	31·5	35·8	− 0·4	0	43	4	0·16	−0·41	25·2†	?	31†	?
	Ochtertyre ⚓	53	22	46·1	29·9	37·8	− 1·3	11	44	4	0·36	−0·28	*	*	*	*
	Leith	52	28	47·0	35·0	40·8	− 0·3	14	27	2	0·10	−0·22	*	*	*	*
	Marchmont ⚓	51	25	45·3	33·3	39·1	+ 0·3	9	31	4	0·17	−0·40	40·8	?	50	?
2. ENGLAND, N.E.	Alnwick Castle	—	—	—	—	—	—	—	—	3	0·12	−0·41	*	*	*	*
	Durham	61	27	48·7	33·9	41·1	+ 1·3	19	32	3	0·10	−0·38	38·8	+15·1	47	+18
	Shields	62	26	49·0	34·1	41·3	+ 0·7	20	31	3	0·13	−0·27	*	*	*	*
	Scarborough ⚓												*	*	*	*
	York	65	29	52·0	35·0	43·3	+ 2·5	39	20	3	0·14	−0·26	44·6	+24·7	54	+27
	Spurn Head	59	32	50·7	37·7	44·0	+ 3·6	32	12	3	0·11	−0·17	*	*	*	*
3. ENGLAND, E.	Hillington ⚓	63	30	52·0	34·9	43·2	+ 2·2	38	20	1	0·07	−0·31	32·2	+ 8·4	39	+10
	Yarmouth	59	30	49·6	37·7	43·5	+ 3·6	29	12	4	0·19	−0·23	*	*	*	*
	Geldeston	62	28	52·3	35·7	45·8	+ 2·3	39	18	3	0·05	−0·30	29·7	+ 2·0	36	+ 2
	Cambridge	65	31	55·1	36·6	45·6	+ 4·2	48	16	3	0·11	−0·20	41·5	+14·9	51	+19
	Rothamsted	62	32	52·3	37·7	44·8	+ 4·1	38	12	2	0·04	−0·35	37·6	?	46	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	65	22	51·3	34·7	42·8	+ 2·0	36	20	3	0·07	−0·32	*	*	*	*
	Loughborough	66	32	53·7	36·6	44·9	+ 3·3	43	15	2	0·10	−0·27	*	*	*	*
	Stamford (Ketton Hall)	63	31	54·7	36·7	45·4	+ 3·7	46	15	3	0·11	−0·21	*	*	*	*
	Cheadle ⚓	62	29	49·7	34·7	42·0	+ 2·2	24	20	3	0·23	−0·29	*	*	*	*
	Churchstoke ⚓	66	28	50·9	37·3	43·9	+ 3·8	33	13	2	0·16	−0·29	35·7	+12·0	44	+15
	Hereford ⚓	63	31	52·9	38·1	45·3	+ 3·2	39	11	2	0·01	−0·37	*	*	*	*
	Cirencester	61	28	51·4	35·9	43·4	+ 3·3	35	17		0·07	−0·41	31·2	+ 6·4	38	+ 8
	Oxford	63	33	53·0	38·0	45·3	+ 3·5	40	11	2	0·03	−0·35	36·3	+11·3	44	+13
5. ENGLAND, S.	London	64	33	52·9	38·4	45·4	+ 2·9	39	10	3	0·08	−0·27	26·9†	+ 8·2†	33†	+10†
	North Foreland	58	34	51·3	40·6	45·8	+ 4·7	32	4	3	0·20	?	*	*	*	*
	Strathfield Turgiss ⚓	62	33	53·6	37·7	45·4	+ 3·6	42	12	4	0·10	−0·27	*	*	*	*
	Dungeness	54	31	50·7	40·4	45·4	+ 3·8	31	4	4	0·07	−0·33	*	*	*	*
	Hastings (St. Leonards)	54	31	50·2	39·8	44·9	+ 2·2	30	6	4	0·21	−0·23	38·4	+ 7·7	47	+10
	Southampton	62	32	54·8	38·3	46·3	+ 3·4	46	10	2	0·06	−0·39	34·7	+ 6·7	42	+ 7
	Hurst Castle	54	37	49·9	40·7	45·2	+ 2·8	28	4	3	0·26	−0·15	*	*	*	*
	Stowell ⚓	58	35	51·1	38·9	44·8	+ 3·4	33	9	4	0·20	?	*	*	*	*
6. SCOTLAND, W.	Landale (Loch Sunart)	50	27	44·7	34·4	39·4	− 1·6	8	27	6	1·12	−0·38	*	*	*	*
	Glasgow	49	29	44·5	34·8	39·5	− 0·6	7	26	3	0·40	−0·17	32·8	+14·8	40	+18
	Ardrossan	50	30	44·9	36·7	40·7	− 0·5	8	20	5	0·35	−0·20	*	*	*	*
	Glenlee ⚓	51	23	46·2	32·8	39·3	+ 0·2	12	34	5	0·66	−0·21	*	*	*	*
	Douglas (Isle of Man)	51	31	46·9	35·9	41·2	− 0·3	14	23	4	0·10	−0·56	41·9	+15·2	51	+18
7. ENGLAND, N.W.	Newton Reigny	56	26	45·5	34·3	39·7	+ 0·9	10	28	4	0·46	−0·04	35·7	+12·8	44	+16
	Stonyhurst	58	31	46·8	34·5	40·5	+ 0·2	13	29	5	0·50	−0·28	36·2	+14·4	44	+17
	Blackpool ⚓	59	33	46·7	37·9	42·2	+ 1·3	19	11	3	0·21	−0·29	26·2	+ 5·3	32	+ 6
	Manchester	66	31	50·2	35·7	42·7	+ 1·9	31	18	3	0·18	−0·38	30·2†	?	37†	?
	Liverpool Obsy. (Bidston)	62	34	48·0	39·7	43·7	+ 1·9	22	6	2	0·07	−0·31	*	*	*	*
	Llandudno ⚓	62	34	49·1	39·0	43·9	+ 1·0	26	8	1	0·08	−0·37	32·3	+11·3	39	+14
	Holyhead	52	35	47·0	40·6	43·7	+ 0·8	18	4	2	0·13	−0·38	*	*	*	*
8. ENGLAND, S.W.	Llandovery	64	24	53·3	36·9	44·9	+ 2·4	42	14	3	0·14	−0·66	*	*	*	*
	Pembroke	52	40	48·6	43·0	45·7	+ 2·9	26	0	3	0·12	−0·43	31·9	+ 3·1	39	+ 3
	Arlington (N. Devon)	62	35	49·6	39·6	44·5	+ 3·3	28	7	4	0·41	−0·39	*	*	*	*
	Cullompton ⚓	58	29	51·9	38·4	45·0	+ 2·6	36	10	4	0·24	−0·34	28·9	+ 2·2	35	+ 2
	Falmouth	53	38	51·2	42·0	46·5	+ 2·2	32	0	4	0·13	−0·65	35·7	+ 6·7	44	+ 8
	Plymouth	58	39	52·1	41·4	46·6	+ 2·7	35	2	3	0·07	−0·53	36·0	+ 6·5	44	+ 8
	Prawle Point	53	37	50·4	41·7	45·9	+ 3·1	29	1	5	0·14	−0·31	*	*	*	*
9. IRELAND, N.	Malin Head	49	32	44·9	39·0	41·9	− 0·7	8	12	5	0·34	?	*	*	*	*
	Londonderry	52	32	47·1	36·2	41·5	− 0·8	14	23	6	0·62	−0·02	*	*	*	*
	Edenfel (Omagh)	50	30	45·1	34·3	39·9	− 0·9	9	26	6	0·39	−0·13	*	*	*	*
	Mullaghmore	50	33	47·3	37·7	42·4	− 0·6	21	12	6	0·44	−0·21	*	*	*	*
	Belmullet	51	35	48·4	39·6	43·9	− 0·9	23	7	6	0·75	?	*	*	*	*
	Markree Castle	50	29	47·3	34·7	40·8	− 1·0	15	28	6	0·78	+0·22	20·5	− 2·4	25	− 3
	Brookeborough	51	30	46·6	34·8	40·5	− 0·1	13	27	6	0·51	−0·13	*	*	*	*
	Armagh	51	30	46·5	34·5	40·3	− 0·6	13	28	4	0·39	−0·09	25·9	+ 5·1	32	+ 6
	Donaghadee	53	32	47·6	36·6	41·9	− 0·1	16	21	5	0·25	−0·22	*	*	*	*
	Edgeworthstown												*	*	*	*
10. IRELAND, S.	Dublin	56	34	49·7	39·8	44·6	+ 1·2	27	6	4	0·12	−0·36	28·6	+ 2·9	35	+ 3
	Parsonstown	52	33	49·4	36·3	42·7	+ 0·6	29	16	3	0·18	−0·34	14·1	−11·6	17	−14
	Kilkenny	56	34	50·9	38·9	44·7	+ 1·8	32	9	4	0·22	−0·26	*	*	*	*
	Waterford	55	36	50·9	40·2	45·4	+ 1·5	31	5	4	0·17	−0·51	*	*	*	*
	Roche's Point	54	38	50·9	42·7	46·7	+ 2·1	33	0	1	0·01	−0·82	*	*	*	*
	Valencia	53	39	51·1	43·1	47·0	+ 1·4	35	0	6	0·37	− 0·57	22·5	− 7·0	27	− 9
	Killarney	55	37	51·9	42·4	47·0	+ 2·7	35	0	2	0·26	?	*	*	*	*
	Foynes	55	38	50·4	42·9	46·5	+ 3·0	32	0	3	0·16	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	55	42	52·4	45·0	48·6	+ 2·7	46	0	3	0·07	−0·47	*	*	*	*
	Jersey	57	42	54·0	44·4	49·1	+ 4·4	50	0	5	0·08	−0·46	38·1	+ 4·6	46	+ 5

Stations marked ⚓ are in connection with the Royal Meteorological Society, and those marked ⚓ with the Scottish Meteorological Society.

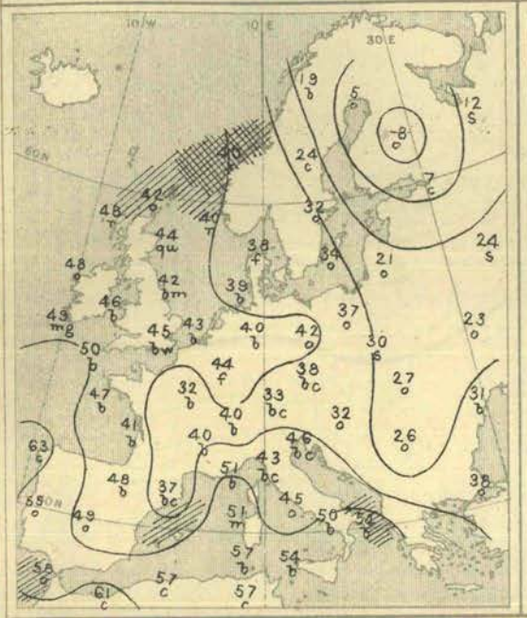
* An asterisk is inserted in all places for which the information is not usually received.

† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

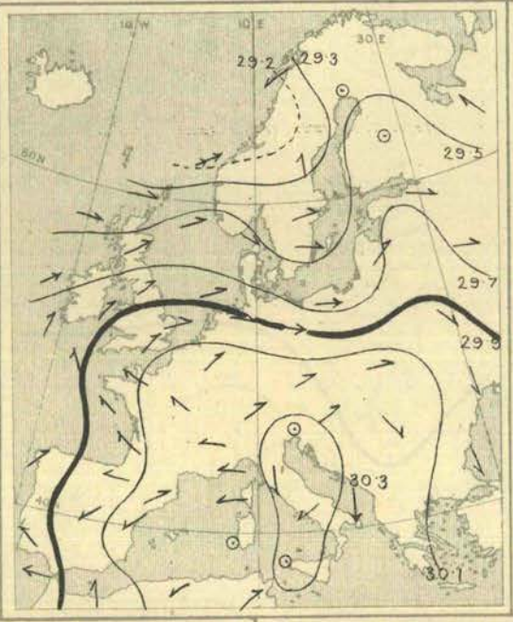
III.—SUMMARY OF WEATHER OVER EUROPE.

Sunday, 12th March.

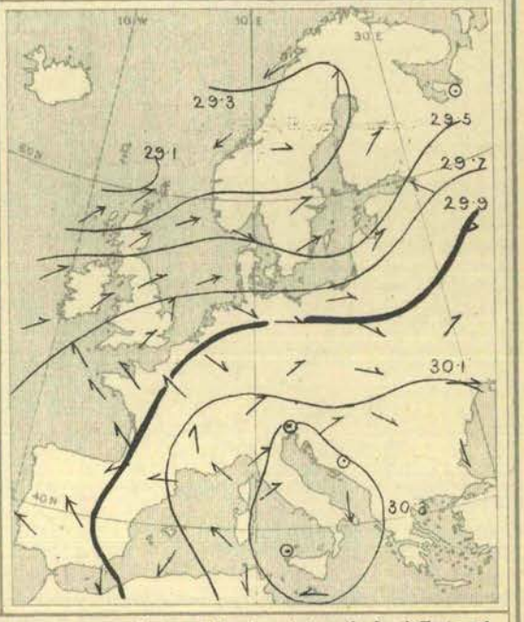
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fine and bright over England, France, Denmark, the Netherlands, western Germany, and Italy. Cloudy or overcast in Ireland and Scotland, with rain in the Hebrides; dull in most parts of Scandinavia, Russia, eastern Germany, and Austria, with rain in the west of Norway, and snow at Memel, Moscow, Warsaw, and Nicolaieff. Showers falling later in Ireland, the west and north of Scotland, and snow over northern Europe generally, but weather remaining exceedingly fine over England.

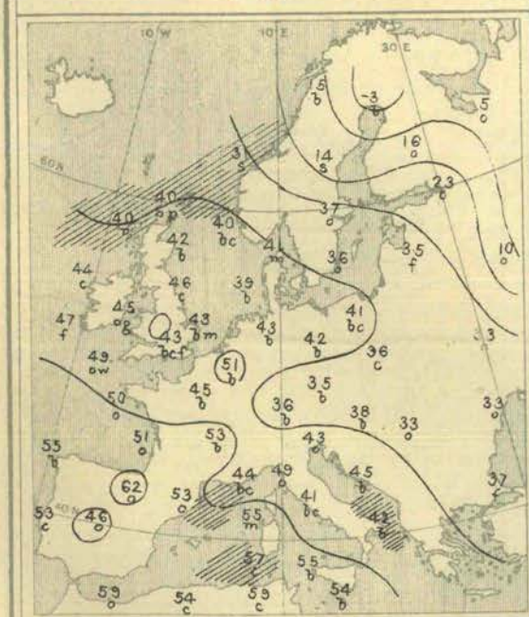
Temperature risen except over Sweden, Finland, Italy, and the south of Russia. Morning readings highest, 65° at Bilbao, 63° at Oporto, 61° at Oran, and 58° at San Fernando, above 50° at most of the Mediterranean stations, and just reaching that point in the Scilly and Channel Islands. Lowest, − 8° at Kuopio, + 2° at Uleaborg, 5° at Haparanda, and 6° at Helsingfors, below the freezing point over Sweden, Russia, and Austria generally. Rising during day to 60° or more over all the inland parts of England, and reaching 66° at Loughborough; exceeding 65° in the west and south of France and over Italy, and reaching 73° at Biarritz, 77° at Tunis, 79° at Oran.

Wind light or moderate from the Eastward over France and Spain, and from the South-Eastward over the greater part of England, South-Westerly in Ireland and Scotland, and Westerly in Norway, Denmark, and Germany; Southerly on the eastern shores of the Baltic. Light from the Northward or North-Westward over south-eastern Europe. No important change occurring during day.

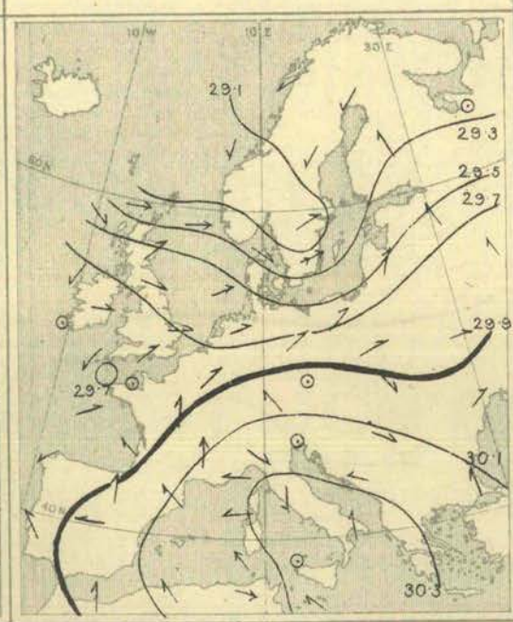
Barometer highest, 30·3 ins. and upwards over Italy and the Adriatic, 30·1 ins. and upwards in a large anticyclone covering the greater part of central and southern Europe and the Mediterranean. Lowest, 29·2 ins. and less in a depression lying over the north-west of Norway. Decided fall taking place all over our Islands during day, and new depression appearing off the north of Scotland in evening, but not of any great depth.

Monday, 13th March.

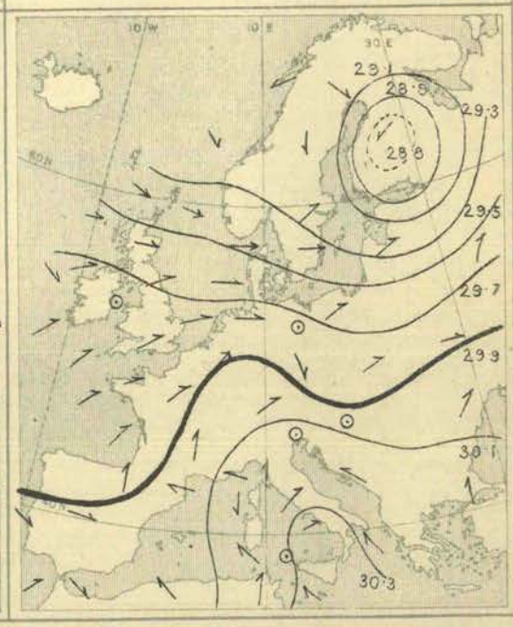
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over the whole of central Europe, together with the eastern half of England and over Lapland; cloudy and unsettled elsewhere, with fog and mist over the southern and south-western parts of the United Kingdom, rain in the far north, snow at Christiansund, Hernösand, and Uleaborg. Snowfall considerable at Hernösand later, some rain in the south of Scotland, also over the southern parts of our Islands and in France. Thunder and lightning in several parts of France.

Temperature risen considerably over Russia, Poland, Hungary, and the Baltic, as well as in many parts of France, fallen over the United Kingdom. Morning readings highest, 62° at Biarritz, and exceeding 50° on the coasts of France, Spain, and Algeria; varying from 49° at Scilly to 40° at Wick and Skudesnaes, and to 41° on the north coast of Germany; lowest, − 3° at Haparanda, + 5° at Archangel, 10° at Uleaborg and Moscow, 14° at Hernösand, 23° at Hangö. Rising later to between 50° or more over Ireland to 50° and 61° over England, to 63° at Lyons, and in several parts of Italy, to 68° at Biarritz, and to 79° at La Calle. Succeeding night mild generally.

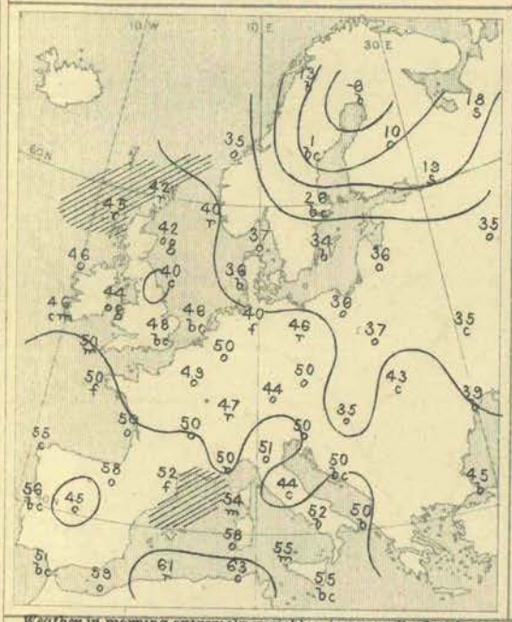
Wind very variable, (1) North-Westerly, light to moderate, over the United Kingdom, Westerly moderate to strong, over the North Sea, and South-Westerly over the Baltic—but North-Easterly over the northern half of Scandinavia; (2) extremely variable in direction, but moderate to strong in force, over the Mediterranean; (3) very light and variable over our south-western districts and the Bay of Biscay. Continuing Westerly at the British and German stations during day, and a decided cyclonic circulation forming over Finland.

Barometer highest, 30·2 ins. and more to 30·0 ins. in a large anticyclone covering the Mediterranean and the whole of southern and south-western Europe, and exceeding 29·3 ins. over Lapland. Lowest, about 29·0 ins. in a complex disturbance over the middle of Norway, and in another over the adjacent parts of the Atlantic. Gradients moderate in most places, slight in the far west. Rising somewhat over the United Kingdom and North Sea later, falling a little over France; the Norwegian depression moving eastwards to Finland and growing deep (28·7 in.)

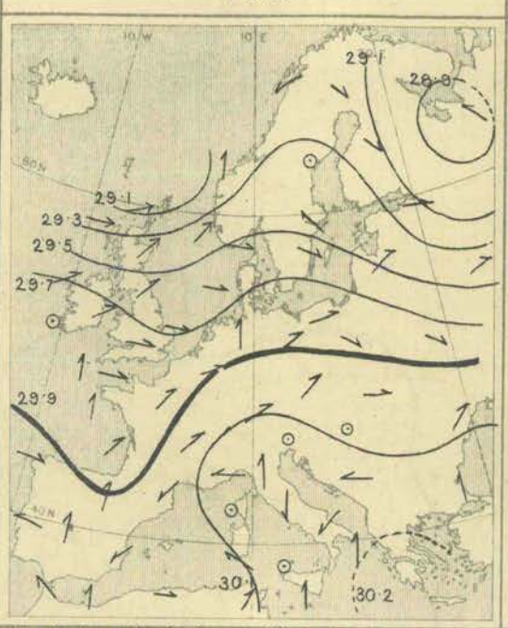
Judd & Co Lt. Lith. 63, Carter Lane, Doctors' Commons

Tuesday, 14th March.

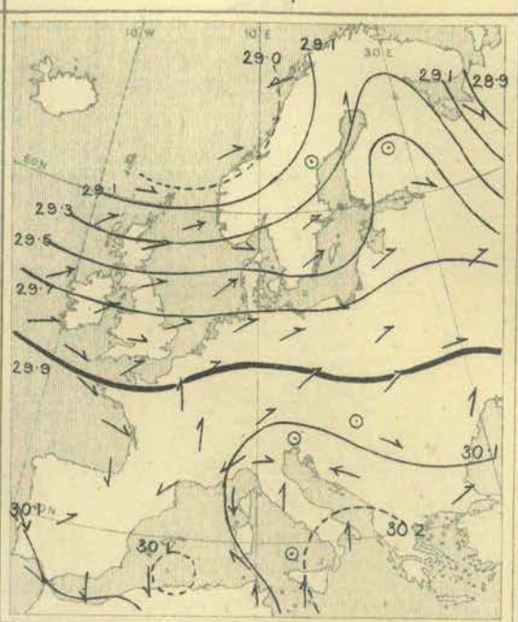
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning extremely variable; temporarily fine in several parts of our Islands, clear and bright in many parts of Sweden and Lapland, as well as in the extreme south-east of Europe, cloudy, as a whole, elsewhere, foggy in the Channel; rain falling at Stornoway and Sumburgh Head, snow at St. Petersburg and Archangel. A little rain in the west and north of our Islands, in most parts of France and north Germany later, lightning at Lyons. Brilliant aurora seen at several northern stations and at Roche's Point.

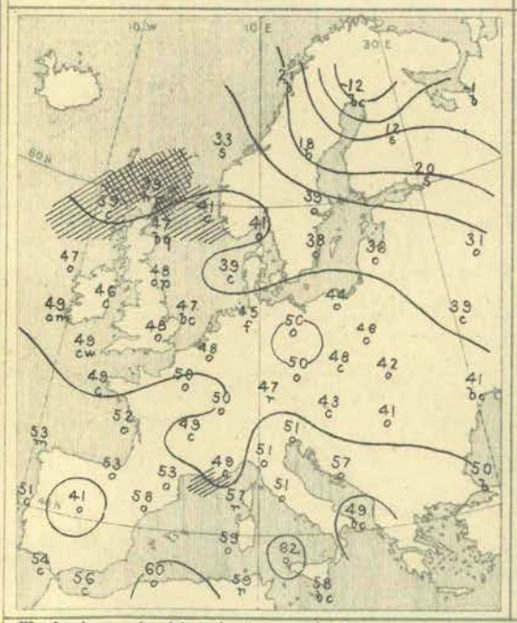
Temperature risen decidedly over central and southern Europe, as well as over central and northern Russia. Morning readings, 60° and more at Algiers and La Calle, 50° and more at most of the Mediterranean and Spanish stations, and also at Scilly, Brussels, and Münster; between 40° and 43° on our north-east coasts, and much below the freezing point over northern Europe. Lowest of all, − 9° Fahr. at Haparanda, − 5° at Uleaborg, + 12° at Helsingfors, 13° at Bodö, 18° at Archangel. Rising later to 50° and more in the north-east of Scotland, to between 53° and 57° over central England, to 61° at Biarritz, 64° at Lisbon, and 65° at Lyons, 75° at Palermo, 77° at La Calle.

Wind extremely variable over south-eastern and southern Europe, with the Mediterranean; mainly Westerly over the more northern countries, and fresh to strong in force over Scotland and the west of Norway. Direction becoming more uniformly Westerly over our Islands later, and force increasing somewhat over England.

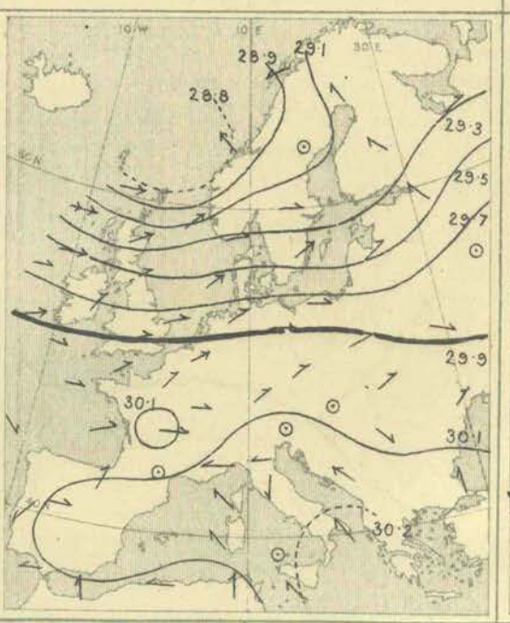
Barometer highest, 30·2 ins. and more to 30·0 ins. over south-eastern, southern, and south-western Europe, as a whole. Lowest, 28·9 ins. and less to 29·0 ins. in a depression over the north of Russia; 29·1 ins. and less in another over the Shetlands and their neighbourhood; several very shallow local disturbances over Germany, France, and England. Barometer falling over Scandinavia later, but inclined to rise over France and the southern parts of the British Islands.

Wednesday, 15th March.

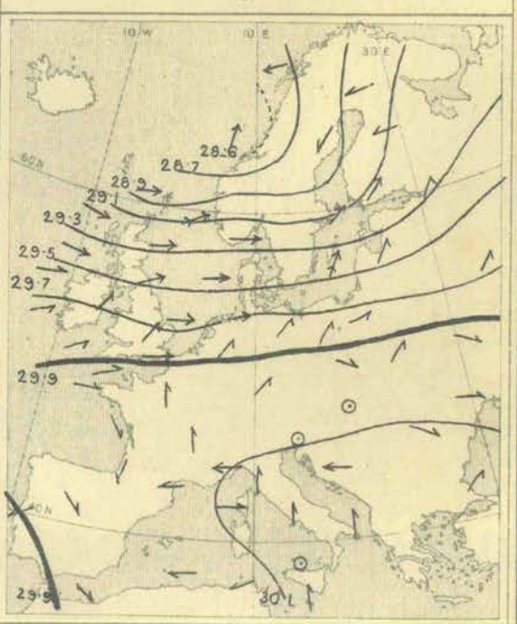
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fair and quiet over the Mediterranean and southern countries of Europe, but cloudy in many places—very changeable over the northern countries, the sky being cloudy or overcast, with rain showers in Ireland, hail in the Shetlands, snow over Finland, fog at Riga, haze in many parts of the Channel. Some rain falling later over the greater part of the United Kingdom, Germany, and also in the south of France. Considerable snow at Christiansund and over the northern parts of Scandinavia; thunder and lightning in the north-west of Ireland and at Lyons.

Temperature risen a little except in Scotland; highest morning readings, 62° at Palermo, 60° at Algiers, and exceeding 50° at most stations in the south of Europe, below 50° over the United Kingdom, below 40° over Scandinavia, the Baltic, and Russia, and lowest of all, − 12° Fahr. at Haparanda, − 1° at Archangel, + 12° at Kuopio, 21° at Bodö, 31° at Moscow. Rising later to between 50° and 55° over Great Britain and some parts of Ireland, to 59° at Paris and Rochefort, 65° at Nice, and 66° at Lyons.

Wind light over the southern countries, and mainly South-Easterly to Easterly at the Mediterranean stations; chiefly Westerly or South-Westerly over the more northern countries, the North Sea, and the Baltic—moderate to strong in force and gusty, and blowing a gale over the Shetlands and north of Scotland; a South-Easterly to Easterly breeze prevalent over the northern half of Norway. Westerly gale in Scotland extending to Norway later, and spreading somewhat down our east coasts, but Easterly wind becoming strong at Bodö.

Barometer highest, 30·2 ins. and upwards over the eastern parts of the Mediterranean, 30·0 ins. and upwards over all the more southern countries of Europe. Lowest, 28·8 ins. and less in a large depression lying to the northward of our Islands; gradients rather steep over Scotland and the northern parts of the North Sea. Depression subsequently moving slowly eastwards, and barometer rising on our northern coasts, slight fall taking place over England, Ireland, France, and central Europe.

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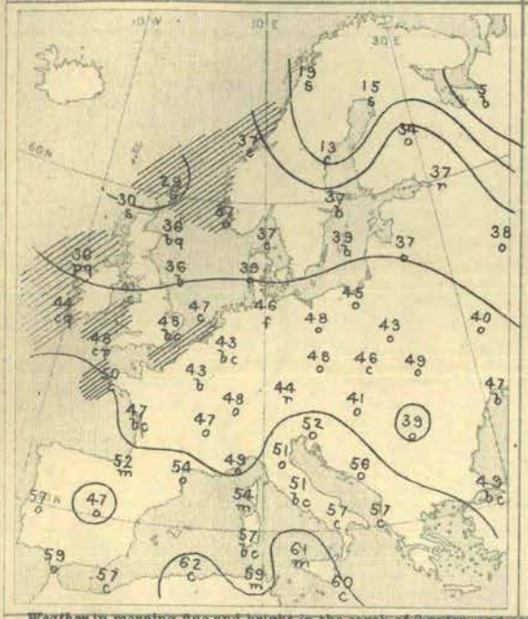
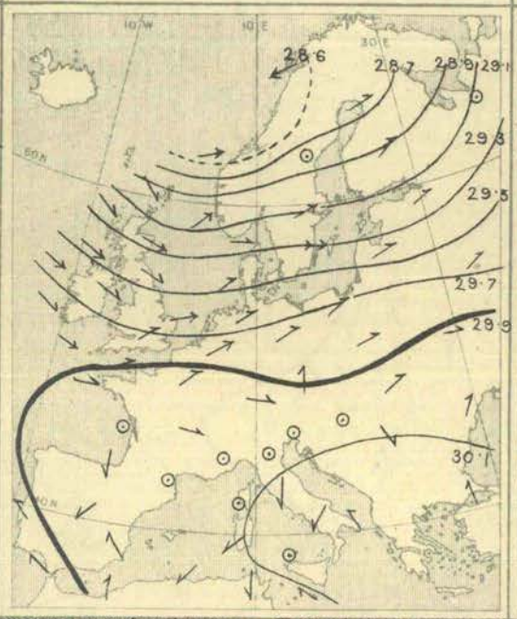
III.—SUMMARY OF WEATHER OVER EUROPE.

Thursday, 16th March.

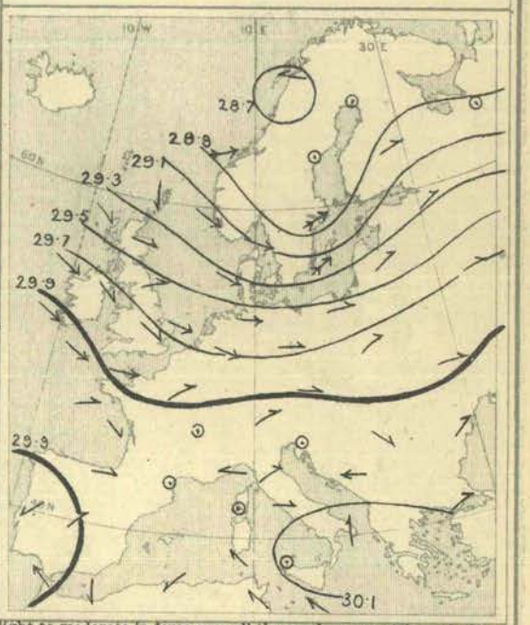
Temperature and Weather, 8 a.m.



Barometer and Wind, 8 a.m.



Barometer and Wind, 6 p.m.



Weather in morning fine and bright in the south of Sweden, and over several parts of south-eastern Europe and Algeria, moderately fair over the southern half of Europe and the Mediterranean, cloudy or overcast over the greater part of the northern countries, and very changeable; showers of cold rain, hail, or snow over the western and northern parts of the United Kingdom, snow over Lapland, rain at St. Petersburg and at Munich. Similar falls reported later over the British Isles, the north of France, Holland, the North Sea, the Baltic, Germany, and Algeria, but amounts slight. (Newspapers report a thunderstorm at Glasgow.)

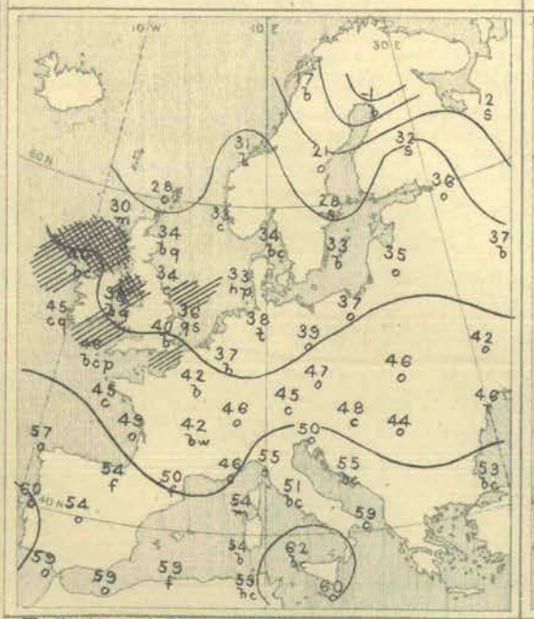
Temperature risen quickly over Finland and the north of Russia, moderately over central and southern Russia, fallen over western Europe generally. Morning readings exceeding 60° at Malta, Palermo, and Algiers, and exceeding 50° at most of the Mediterranean and Spanish stations; below 50° over the British Isles, central and south-eastern Europe, still lower in the far north. Lowest, 5° at Archangel, 13° at Hernösand, 18° at Bodö, 37° at Christiansund, Stockholm, and St. Petersburg. Rising later to between 75° and 80° over Algeria, to 61° at Biarritz, 50° or more at most French and German stations and over the south of England; not touching 40° in the north-east of Scotland or in Norway. Night cold over our Islands.

Wind variable in direction and light to moderate in force over all the southern countries and the Mediterranean. Fresh to strong from West and North-West over the British Islands, and from South-West over the Netherlands and Germany, strong to a gale from the Westward over the southern half of Scandinavia, and from South-West over the Gulf of Finland, but moderate from North-East over Lapland, and very light North-Easterly at Archangel. Veering to North-West in Norway later, and a North-Westerly current spreading southwards over the west and north of France.

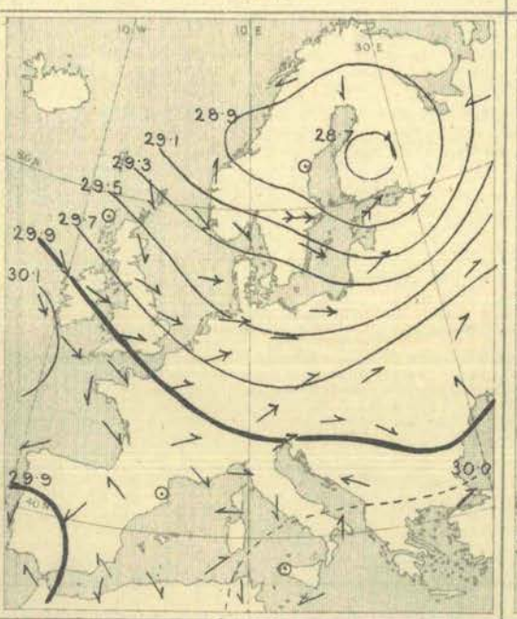
Barometer highest, 30·1 ins. and more to 30·0 ins. over the whole of south-eastern and southern Europe and the Mediterranean. Lowest, 28·6 ins. and less in depressions over the northern half of Scandinavia. Gradients slight over the southern countries, moderate to rather steep over the northern. Rising somewhat decidedly in the west and north of our Islands later, falling over Sweden, the Baltic, and central Europe.

Friday, 17th March.

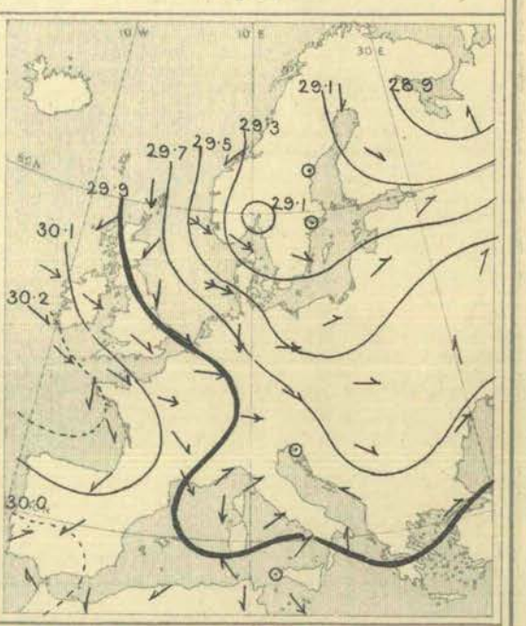
Temperature and Weather, 8 a.m.



Barometer and Wind, 8 a.m.



Barometer and Wind, 6 p.m.



Weather in morning dry and bright over many parts of the British Islands, France, and Scandinavia—but not settled; cloudy in other places, with squalls of cold rain, sleet, or hail over some of the north-western and northern parts of the Kingdom, snow at many of the Finnish stations, at Stockholm, and at Archangel. Showers of snow and "graupel" later over nearly the whole of the British Isles and north-western Europe, and a little in some parts of Austria and Hungary; amount measured not large except in some parts of the Netherlands, where the fall was very large in certain localities.

Temperature fallen in most places—quickly over England. Morning readings, 55° to 65° on the coasts of Spain, Algeria, and the southern parts of Italy, and rather lower over the northern parts of the Mediterranean and Adriatic; below 50° even in the west and south of the United Kingdom, below 40° in the north-east and over Russia. Lowest, 1° Fahr. at Haparanda, + 12° at Archangel, 17° at Bodö, and 21° at Hernösand. Slightly exceeding 50° at some of our south-western stations later, and touching 57° at Rochefort, 59° at Nice, 68° in some parts of Spain and Italy, 70° at Lisbon, and 75° to 79° over Algeria.

Wind remaining light to moderate in force and variable in direction over the southern countries and the Mediterranean, but strong to a gale from North-West on our north-western coasts, strong to fresh from West over England and the Channel. Strong to a gale from West over the North Sea and from South-West over the Gulf of Finland; moderate Easterly to Northerly over Lapland. Gale in North-West moderating during morning, but extending to Norway and continuing over the Netherlands.

Barometer highest, 30·1 ins. and more off the south-west of Ireland, and exceeding 29·9 ins. over all the south-western parts of our Island the Bay of Biscay, and the greater part of Spain, France, the Mediterranean, and south-western Europe. Lowest, 28·7 ins. and less in a well-marked depression over Finland. Gradients somewhat steep for North-Westerly winds over north-western Europe and the British Islands, where also shallow local disturbances appeared moving south-eastwards.

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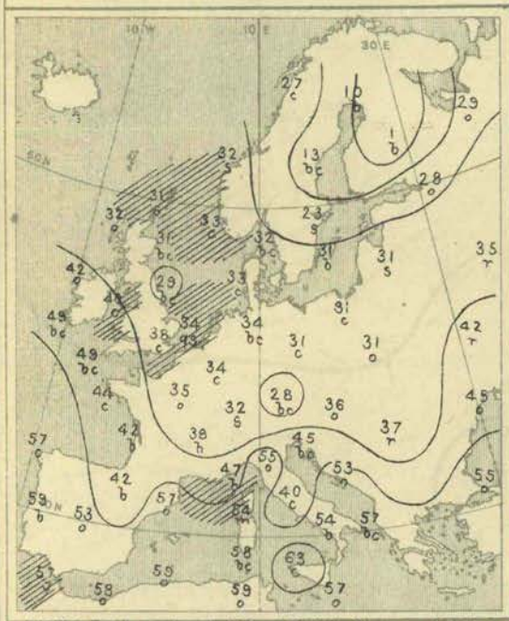
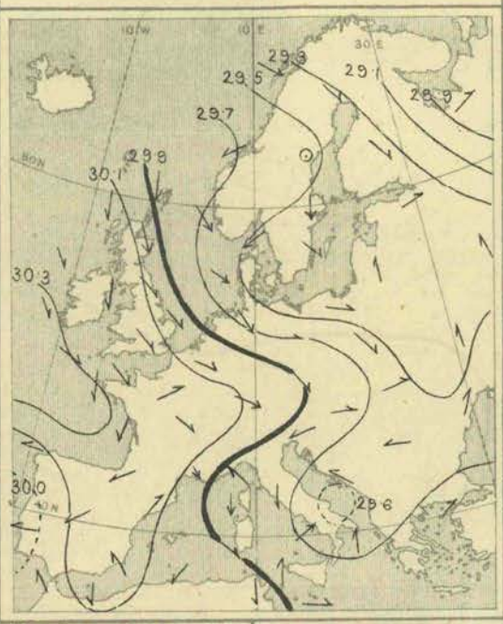
III.—SUMMARY OF WEATHER OVER EUROPE.

Saturday, 18th March.

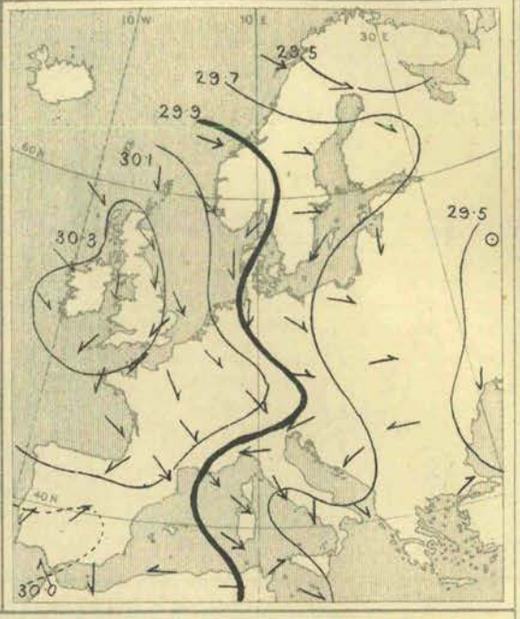
Temperature and Weather. — 8 a.m.



Barometer and Wind. — 8 a.m.



Barometer and Wind. — 6 p.m.



Weather fine in most parts of Great Britain, France, and Italy, as well as at many of the Swedish and northern Russian stations. Dull in Ireland and the north of Scotland, with rain at Parsonstown, and snow at Sumburgh Head; snow reported also at Christiansund, Stockholm, Riga, the Helder, and Belfort. Dull in Spain and Algeria, rainy in some parts of Austria and the south of Russia. A little rain falling later at several of the Irish stations, and snow in the Netherlands; no change occurring elsewhere.

Temperature risen a little in the west of our Islands, but fallen elsewhere. Morning readings highest, 62° at Palermo, 62° at Sfax, and 59° at Lisbon, Algiers, and La Calle; above 50° at most of the Mediterranean and Adriatic stations, but below it in the Riviera. Lowest, – 2° Fahr. at Uleaborg, + 1° at Knopio, 10° at Haparanda, 13° at Hernösand, and 20° at Hangö; below the freezing point over northern and central Europe generally, as well as in the north and north-east of Great Britain. Daily maxima over our Islands reaching 50° on our extreme west and south-west coasts only; thermometer exceeding 55° in the west of France, and exceeding 60° in most parts of southern Europe. Very sharp frost occuring over England at nigh.

Wind North-Westerly or Northerly over nearly the whole of western and northern and a considerable portion of central Europe; light to fresh in force generally, but strong to a gale on the eastern and southern shores of the North Sea. South-Westerly or Southerly over the southern parts of Russia and Italy. North-Easterly or Easterly in Spain and Algeria. Subsequently becoming light and variable in Ireland and South-Westerly in Spain; no important change occuring elsewhere.

Barometer highest, 30·3 ins. and upwards in an anticyclone lying to the south-westward of our Islands. Lowest, 28·9 ins. and less in a depression lying over northern Europe; 29·4 ins. and less in an ill-defined secondary system lying over the Baltic and the neighbouring provinces; 29·6 ins. and less in a small shallow disturbance over the Adriatic. Anticyclone in extreme south-west subsequently spreading north-eastwards over the entire Kingdom.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force is indicated thus: ⟿ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the left-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Germany, Sweden, and Norway, and 7 a.m. in France, Algeria, Italy, Austria, and Russia; that for 6 p.m. is prepared from observations made at 6 p.m. in the British Islands and France, 7 p.m. in Algeria, 8 p.m. in Sweden and Norway, Germany, and Austria, and 9 p.m. in Russia, Belgium, and Italy. The time indicated in each case is the standard time for each country.

GENERAL NOTES.

During by far the greater part of this week barometric pressure has been high over the Mediterranean and the southern countries of Europe, low in the north, and in the latter region several depressions have been observed moving from west to east. Thus, while in the former regions the winds reported have been light and variable, those over the northern countries have been Westerly (South-West to North-West) in direction, and comparatively strong in force; on several occasions gales have been experienced at the Scotch and Scandinavian stations. On Friday, however, the depressions observed over northern Europe began to take a more southerly course, and a new high-pressure system appeared off the west of Ireland, and subsequently advanced eastwards over the United Kingdom. The winds consequently veered to North-West and North over the northern countries, and after blowing strongly in many places (especially on the eastern shores of the North Sea) decreased gradually.

Temperature was high for the time of year over all the western and central countries until Friday, but a decided fall then ensued, and frosts of considerable severity were experienced during the night-time over the inland parts of the British Islands, France, and Germany.

Rainfall was greatest in the far north, slight generally elsewhere, but rather large quantities fell in the southern parts of France between the 13th and 14th, and considerable quantities of snow in some parts of Holland towards the end of the week.

BRIGHT SUNSHINE Values for the Week in addition to those found on page 62.

Stations.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	Stations.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	32·5	?	40	?	EASTBOURNE	40·7	?	50	?
OSWALDKIRK (Yorkshire)	46·2	?	56	?	TENBY	34·1	?	42	?
WORKSOP	49·1	+18·4	49	+22	NEWQUAY	35·8	?	44	?
THURCASTON (Leicestershire)	36·0	+6·2	44	+20	TORQUAY	26·7*	?	33*	?
MARGATE	37·4	?	46	?	ARLEY COTTAGE (County Cavan)	26·0	?	32	?
WESTBOURNE (Sussex)	37·3*	?	45*	?	GUERNSEY	37·2*	?	45*	?
BRIGHTON	35·8	?	44	?					

* The values at Westbourne, Tenby, Torquay, and Guernsey are obtained by Jordan's Photographic Recorder.

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WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; R. H. SCOTT, F.R.S., SECRETARY.
By whom Subscriptions, payable in advance, can be received.
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VOL. X. No. 12.] *Third Series.* WEEK ENDING SATURDAY, 25TH MARCH, 1893. [*Price 6d.* (*Annual subscription, post paid*, £1 10s. 0d.)

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871-90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding periods in the twenty-five years 1856-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90, only. RAINFALL.—*The Mean amounts* are those for the corresponding periods in the twenty-five years 1856-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90, only. BRIGHT SUNSHINE.—*The Mean values* employed are those for the corresponding periods in the ten years 1881-90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

	DISTRICTS. (See p. 68.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 1st, 1893. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	64	19	54·1	33·8	43·7	4 above.	46	+37	23	−10	118	+ 39	424	+ 14
	1. SCOTLAND, EAST	67	17	58·7	30·8	44·4	5 above.	64	+48	31	− 2	151	+ 31	471	+ 19
	2. ENGLAND, N.E.	68	22	57·3	33·1	44·8	4 above.	57	+41	25	− 5	180	+ 64	374	− 35
	3. ENGLAND, EAST	69	23	56·2	29·6	42·5	1 above.	58	+34	35	+ 2	225	+ 86	451	− 10
	4. MIDLAND COUNTIES	69	19	60·2	28·0	43·6	2 above.	70	+47	39	+ 6	255	+ 99	423	− 24
	5. ENGLAND, SOUTH	65	21	54·9	33·4	43·9	1 above.	49	+27	24	− 3	239	+ 67	339	− 16
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	63	20	55·0	32·9	43·7	3 above.	50	+36	25	0	172	+ 49	316	− 17
	7. ENGLAND, N.W.	66	23	57·3	35·9	46·3	4 above.	56	+41	17	− 9	194	+ 73	293	− 48
	8. ENGLAND, S.W.	69	23	56·3	35·7	46·2	3 above.	52	+31	15	− 6	272	+ 73	227	− 39
	9. IRELAND, NORTH	65	32	56·4	39·2	47·6	5 above.	51	+31	8	−14	221	+ 43	237	− 56
	10. IRELAND, SOUTH	65	32	55·9	40·0	47·7	4 above.	48	+23	6	−13	304	+ 52	160	− 66
	— CHANNEL ISLANDS	63	38	56·8	42·8	49·6	4 above.	53	+28	0	− 9	367	+111	70	− 43

Rainfall.

	DISTRICTS. (See p. 68.)	For the Week. Number of Rainy Days.	Total Fall.	More or less than the Mean for the Week.	From January 1st, 1893. Number of Rainy Days.	Difference from Mean.	Total Fall.	Difference from Mean.
			10ths of In.	10ths of In.			Ins.	Ins.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	1	1	8 less.	62	+ 1	12·8	− 0·3
	1. SCOTLAND, EAST	0	less than ½	5 less.	50	+ 3	5·9	− 1·2
	2. ENGLAND, N.E.	0	–	4 less.	43	0	4·6	− 0·5
	3. ENGLAND, EAST	0	–	4 less.	49	+ 6	5·1	0·0
	4. MIDLAND COUNTIES	0	–	4 less.	47	+ 6	4·9	− 1·1
	5. ENGLAND, SOUTH	0	–	4 less.	48	+ 7	6·1	− 0·2
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	0	–	8 less.	55	+ 4	9·6	− 3·7
	7. ENGLAND, N.W.	0	–	5 less.	48	+ 2	6·3	− 1·2
	8. ENGLAND, S.W.	0	–	6 less.	48	+ 1	8·7	− 1·1
	9. IRELAND, NORTH	1	less than ½	6 less.	57	+ 3	7·7	− 0·6
	10. IRELAND, SOUTH	0	less than ½	6 less.	49	0	8·6	− 1·3
	— CHANNEL ISLANDS	0	–	5 less.	55	+ 2	7·3	− 0·8

Bright Sunshine.

	DISTRICTS. (See p. 68.)	For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 1st, 1893. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	31	?	36	?	145	−13	19	− 2
	1. SCOTLAND, EAST	56	+32	66	+36	220	+13	28	+ 1
	2. ENGLAND, N.E.	58	+33	68	+39	229	+54	29	+ 7
	3. ENGLAND, EAST	65	+39	76	+44	245	+37	30	+ 4
	4. MIDLAND COUNTIES	64	+40	75	+46	243	+56	30	+ 7
	5. ENGLAND, SOUTH	65	+33	77	+35	241	+50	29	+ 6
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	43	+19	51	+22	210	+40	27	+ 5
	7. ENGLAND, N.W.	53	+32	62	+37	195	+21	25	+ 3
	8. ENGLAND, S.W.	69	+39	81	+46	273	+49	33	+ 6
	9. IRELAND, NORTH	44	+21	52	+23	190	+11	24	+ 1
	10. IRELAND, SOUTH	51	+23	60	+26	212	− 7	26	− 1
	— CHANNEL ISLANDS	77	+41	91	+48	295	+22	35	+ 2

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather during this week was extremely fine, bright, and dry over the whole of the Kingdom. In London, however, the sun was frequently obscured during the early part of the day by low fog or haze.

Temperature during the day-time was very high for the time of year, low at night, the diurnal range during the latter part of the period was unusually large, amounting to between 40° and 42° at some of the central English stations. The average for the week was only a little in excess of the normal over eastern, southern, and central England, but exceeded it by 4° over the northern counties, and by 4° or 5° in Ireland and most parts of Scotland. The highest of the maxima (which were recorded either on the 24th or 25th) ranged from 63° in Scotland W. and 64° in Scotland N. to 69° in England E., the Midland Counties, and England S.W. The lowest of the minima occurred at most stations at the beginning of the period, when they ranged from 17° in Scotland E., and 19° in Scotland N. and the Midland Counties, to 32° in Ireland, and to 38° in the Channel Islands.

Rainfall was entirely absent from the greater part of the Kingdom, the only exceptions being some localities in the west and north of Ireland, and the north and east of Scotland, where some small amounts were measured either at the beginning or end of the week.

Bright Sunshine was unusually prevalent, and greatly exceeded the mean. The percentage of the possible duration ranged from 36 to 66 in Scotland, from 52 to 60 in Ireland, and from 62 to 81 in the English districts; in the Channel Islands the percentage was as high as 81. These weekly percentages are in nearly all districts far higher than any previously recorded in the month of March since the Sunshine recorders were first established in 1881; that for the Channel Islands is higher than any hitherto obtained during any period.

Barometer and Wind.—During the whole of this week the distribution of pressure was anticyclonic and the wind light; in direction the winds were mainly Easterly in the south, Southerly in the west, and South-Westerly to Westerly in the north. At the end of the period the barometer was inclined to fall a little and irregularly, but there was no decided indication of any material change in the conditions.

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II.—DATA from which the SUMMARY on page 67 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°				Inches	Inches.				
0. SCOTLAND, N.	Sumburgh Head ⚓	57	30	50·4	38·7	44·4	+ 5·7	31	9	4	0·08	−0·51	*	*	*	*
	Stornoway ⚓	53	30	51·0	36·4	43·5	+ 3·5	34	16	0	—	−0·81	20·7	− 3·1	24	− 5
	Wick ⚓	60	27	54·9	33·7	43·9	+ 3·9	48	23	0	—	−0·42	*	*	*	*
	Lairg ⚓	64	19	58·5	29·6	43·3	+ 4·6	64	36	1	0·13	−0·51	*	*	*	*
	Glencarron ⚓	62	21	53·9	33·1	43·2	+ 4·1	46	25	1	0·08	−1·30	*	*	*	*
	Fort Augustus ⚓	64	24	57·1	31·5	43·9	+ 3·9	57	29	1	0·06	−0·54	29·9	?	35	?
	Fort William ⚓	59	26	53·0	34·3	43·4	+ 2·4	42	22	2	0·07	−1·16	41·0	?	48	?
1. SCOTLAND, E.	Nairn ⚓	64	24	59·1	30·3	44·3	+ 4·0	65	33	1	0·06	−0·32	*	*	*	*
	Aberdeen ⚓	64	27	59·6	32·9	45·9	+ 6·0	66	25	0	—	−0·50	57·4	+30·7	68	+36
	Braemar ⚓	61	17	54·5	25·9	39·8	+ 2·9	35	62	0	—	−0·55	64·0†	?	75	?†
	Ochtertyre ⚓	65	30	60·4	32·7	46·1	+ 6·1	68	26	0	—	−0·60	*	*	*	*
	Leith ⚓	65	26	58·7	29·7	43·8	+ 2·0	64	34	0	—	−0·34	*	*	*	*
	Marchmont ⚓	67	23	59·9	33·4	46·2	+ 6·7	66	24	0	—	−0·57	57·8	?	68	?
2. ENGLAND, N.E.	Alnwick Castle	—	—	—	—	—	—	—	—	0	—	−0·52	*	*	*	*
	Durham	67	22	61·5	30·6	45·6	+ 5·3	73	32	0	0·01‡	−0·50	63·1	+37·9	74	+45
	Shields	63	26	56·9	32·7	44·4	+ 3·5	56	26	0	—	−0·42	*	*	*	*
	Scarborough ⚓	63	33	58·0	37·4	47·4	+ 6·0	57	13	0	—	−0·47	*	*	*	*
	York	68	25	61·0	29·0	44·5	+ 2·9	72	36	0	—	−0·39	50·4	+26·9	59	+31
	Spurn Head	54	32	49·3	35·7	42·3	+ 1·4	29	18	0	—	−0·28	*	*	*	*
3. ENGLAND, E.	Hillington ⚓	66	25	59·2	28·9	43·6	+ 1·8	66	37	0	—	−0·37	61·3	+35·8	72	+42
	Yarmouth	50	30	46·4	35·4	40·7	+ 0·3	12	25	0	0·01‡	−0·39	*	*	*	*
	Geldeston	65	27	56·4	28·4	42·0	− 0·3	40	38	0	—	−0·32	70·2	+39·9	83	+48
	Cambridge	69	23	62·1	28·7	44·9	+ 2·7	76	37	0	—	−0·31	66·7	+37·0	78	+45
	Rothamsted	62	23	57·0	26·4	41·2	− 0·4	42	62	0	0·02‡	−0·37	60·9	?	72	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	68	25	61·9	27·4	44·1	+ 2·3	76	41	0	—	−0·38	*	*	*	*
	Loughborough	69	20	63·0	25·1	43·5	+ 1·0	81	47	0	—	−0·39	*	*	*	*
	Stamford (Ketton Hall)	66	20	60·4	24·6	42·0	− 0·3	52	49	0	—	−0·38	*	*	*	*
	Cheadle ⚓	64	27	58·3	34·8	46·2	+ 5·7	60	20	0	—	−0·48	*	*	*	*
	Churchstoke ⚓	66	22	59·8	28·8	43·8	+ 3·1	68	37	0	—	−0·42	67·2	+41·4	79	+49
	Hereford ⚓	66	22	60·1	27·9	43·5	+ 0·7	70	39	0	—	−0·38	*	*	*	*
	Cirencester	63	19	58·0	26·7	41·9	+ 1·1	45	62	0	—	−0·47	62·1	+35·7	73	+42
	Oxford	65	23	59·7	28·3	43·5	+ 0·9	68	38	0	—	−0·38	66·7	+39·7	78	+46
5. ENGLAND, S.	London	64	25	57·4	31·0	43·8	+ 0·6	59	31	0	—	−0·35	34·0†	+13·0†	40†	+15†
	North Foreland	51	32	48·0	37·6	42·7	+ 0·8	23	12	0	0·01‡	?	*	*	*	*
	Strathfield Turgiss ⚓	65	21	58·7	26·4	42·1	− 0·6	66	44	0	—	−0·33	*	*	*	*
	Dungeness	56	26	51·4	35·7	43·3	+ 1·1	36	18	0	—	−0·42	*	*	*	*
	Hastings (St. Leonards)	62	30	54·4	37·4	45·7	+ 2·0	45	13	0	—	−0·45	71·8	+38·8	84	+46
	Southampton	64	26	57·1	31·6	44·0	+ 0·2	58	29	0	—	−0·44	71·6	+40·6	84	+47
	Hurst Castle	61	30	55·4	35·1	45·0	+ 1·1	50	19	0	—	−0·40	*	*	*	*
	Stowell ⚓	63	27	57·1	32·3	44·3	+ 2·2	57	27	0	—	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	60	28	55·9	38·4	46·9	+ 5·2	49	10	2	0·16	−1·28	*	*	*	*
	Glasgow	61	28	54·2	34·2	43·9	+ 3·3	46	22	0	—	−0·54	26·8	+ 7·3	32	+ 9
	Ardrossan ⚓	62	29	54·7	34·9	44·5	+ 2·8	47	20	0	—	−0·53	*	*	*	*
	Glenlee ⚓	63	20	55·1	25·1	39·7	0·0	37	66	0	—	−0·86	*	*	*	*
	Douglas (Isle of Man)	60	29	55·0	32·1	43·4	+ 1·5	51	28	0	—	−0·64	58·4	+29·1	69	+34
7. ENGLAND, N.W.	Newton Reigny	66	23	59·2	29·8	44·1	+ 4·3	63	34	0	—	−0·48	54·6	+29·7	64	+35
	Stonyhurst	61	25	55·5	33·7	44·3	+ 3·3	51	23	0	—	−0·75	60·3	+37·0	71	+43
	Blackpool ⚓	64	28	57·4	36·7	46·7	+ 5·2	55	15	0	—	−0·50				
	Manchester	66	27	59·8	36·0	47·5	+ 5·9	64	17	0	—	−0·53	45·1†	?	53†	?
	Liverpool Obsy. (Bidston)	64	31	57·7	36·9	47·0	+ 4·4	56	14	0	—	−0·38	*	*	*	*
	Llandudno ⚓	65	31	56·4	38·6	47·2	+ 3·4	51	10	0	—	−0·44	50·5	+28·1	59	+33
	Holyhead	62	36	55·1	39·3	47·0	+ 3·4	46	8	0	—	−0·49	*	*	*	*
8. ENGLAND, S.W.	Llandovery	69	23	64·0	29·3	46·1	+ 3·3	82	36	0	—	−0·77	*	*	*	*
	Pembroke	57	36	51·9	40·6	46·1	+ 2·9	35	4	0	—	−0·52	64·1	+32·8	75	+37
	Arlington (N. Devon)	64	31	58·0	35·7	46·5	+ 4·7	58	18	0	—	−0·75	*	*	*	*
	Cullompton ⚓	66	25	57·4	28·7	42·6	− 0·2	60	37	0	0·01‡	−0·52	72·9	+43·9	86	+52
	Falmouth	55	37	51·6	42·4	46·9	+ 2·1	34	0	0	—	−0·75	73·3	+42·1	86	+49
	Plymouth	63	34	56·7	38·3	47·2	+ 2·5	52	10	0	—	−0·58	70·5	+38·7	83	+46
	Prawle Point	62	39	54·7	41·7	48·0	+ 5·0	43	1	0	—	−0·47	*	*	*	*
9. IRELAND, N.	Malin Head	61	38	54·7	42·0	48·2	+ 5·5	43	0	0	—	?	*	*	*	*
	Londonderry	64	33	58·6	40·3	49·2	+ 6·3	58	5	0	—	−0·61	*	*	*	*
	Edenfel (Omagh)	65	32	58·4	35·0	46·8	+ 5·4	59	17	1	0·01	−0·51				
	Mullaghmore	60	39	55·7	43·0	49·2	+ 5·6	50	0	1	0·02	−0·59	*	*	*	*
	Belmullet	60	38	55·3	42·3	48·6	+ 5·4	46	0	0	—	?	*	*	*	*
	Markree Castle	60	33	55·9	38·3	46·8	+ 4·5	49	10	1	0·01	−0·53	31·2	+ 6·2	37	+ 7
	Brookeborough	63	32	57·9	37·0	47·1	+ 6·0	57	14	0	—	−0·62	*	*	*	*
	Armagh	62	32	57·2	35·1	46·8	+ 4·2	56	19	1	0·02	−0·46	54·0	+31·6	64	+37
	Donaghadee	56	36	53·7	39·3	46·3	+ 3·6	41	8	2	0·02	−0·43	*	*	*	*
	Edgeworthstown												*	*	*	*
10. IRELAND, S.	Dublin	62	38	57·3	39·6	48·2	+ 4·3	53	7	0	—	−0·48	64·2	+36·0	76	+43
	Parsonstown	65	36	59·3	38·3	48·5	+ 5·8	61	10	0	—	−0·53	54·2	+26·0	64	+32
	Kilkenny	62	32	56·9	36·4	46·4	+ 3·0	54	16	0	—	−0·49	*	*	*	*
	Waterford	58	32	54·2	36·2	44·9	+ 0·6	45	16	0	—	−0·68	*	*	*	*
	Roche's Point	52	42	50·9	44·1	47·4	+ 2·5	38	0	0	—	−0·80	*	*	*	*
	Valencia	61	41	56·1	44·1	49·9	+ 4·1	55	0	2	0·26	−0·62	35·2	+ 3·0	41	+ 3
	Killarney	61	38	56·4	41·6	48·7	+ 4·1	49	1	0	—	?	*	*	*	*
	Foynes	60	36	56·3	39·3	47·6	+ 3·8	51	8	1	0·02	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	58	41	53·9	44·1	48·9	+ 3·0	48	0	0	—	−0·53	*	*	*	*
	Jersey	65	38	59·6	41·4	50·2	+ 4·9	60	2	0	—	−0·50	77·3	+41·2	91	+48

Stations marked ⚓ are in connection with the Royal Meteorological Society, and those marked ⚓ with the Scottish Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

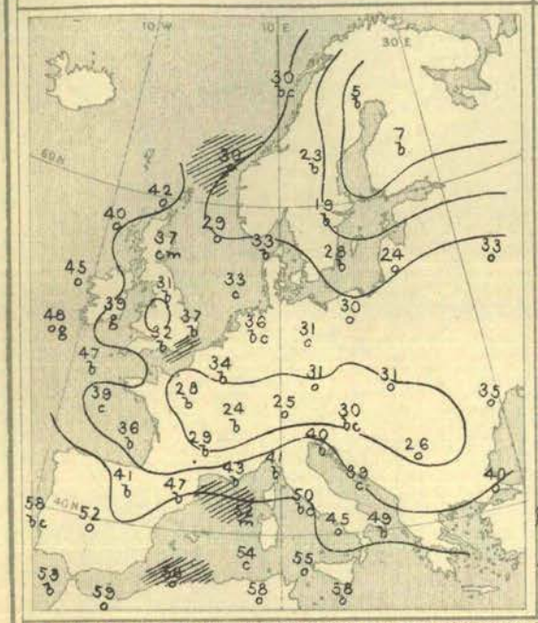
‡ Dew.

ERRATUM.—The "Rainfall in the Week" at Waterford in the Report for last week should read "0·16" and the "Difference from the Mean" "0·32."

III.—SUMMARY OF WEATHER OVER EUROPE.

Sunday, 19th March.

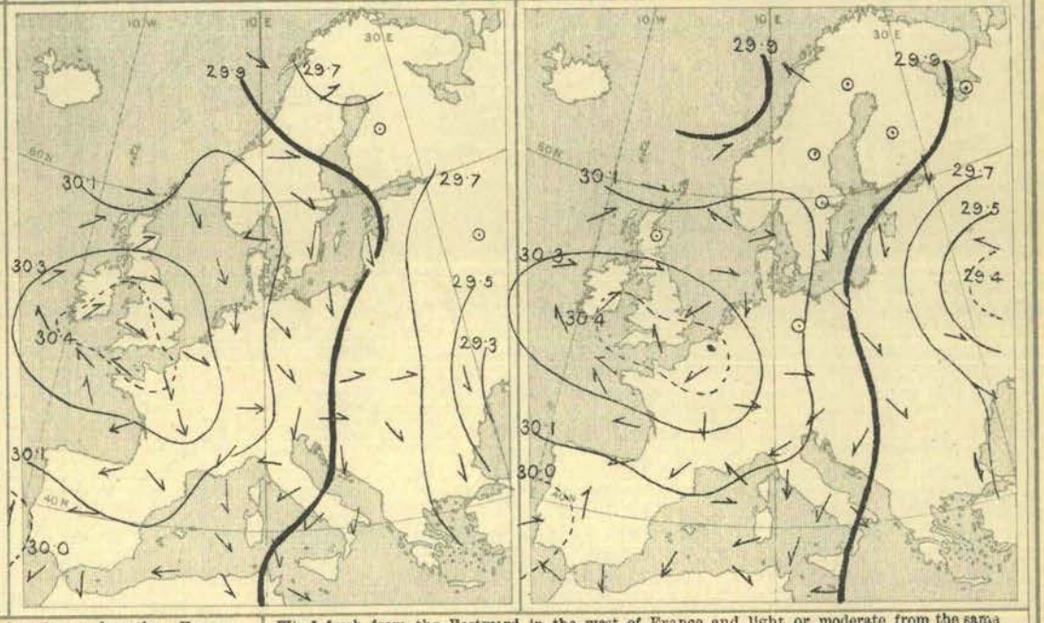
Temperature and Weather. 8 a.m.



Weather fine and bright over Great Britain and most other parts of western and southern Europe, as well as in Finland and Sweden. Dull in Ireland and the west and north of Scotland, with rain and fog at Mullaghmore, cloudy or overcast in the more eastern and central parts of the Continent, and also in Algeria. A little rain falling during day at one or two of our extreme northern and north-western stations, but weather remaining fine and dry in all other parts of our Islands. Snow reported in the west of Norway in evening, and heavy rain at Madrid.

Temperature risen at several of the Irish and Scotch stations, but fallen elsewhere. Morning readings highest, 62° at Sfax, 59° at Oran, and 58° at Lisbon, Barcelona, Algiers, La Calle, and Malta, above 50° over Spain and the Mediterranean generally, but below 45° in the Riviera. Lowest, 1° at Uleaborg, 5° at Haparanda, and 7° at Kuopio and Hangö; below the freezing point over the greater part of northern, eastern, and central Europe, and also over the inland parts of England. Rising during day to 50° or a little more in several parts of England and Ireland, but remaining below 45° over our south-eastern counties. Exceeding 60° in Spain and the extreme southern parts of France and Italy. Sharp frost occurring over England at night.

Barometer and Wind. 8 a.m. 6 p.m.

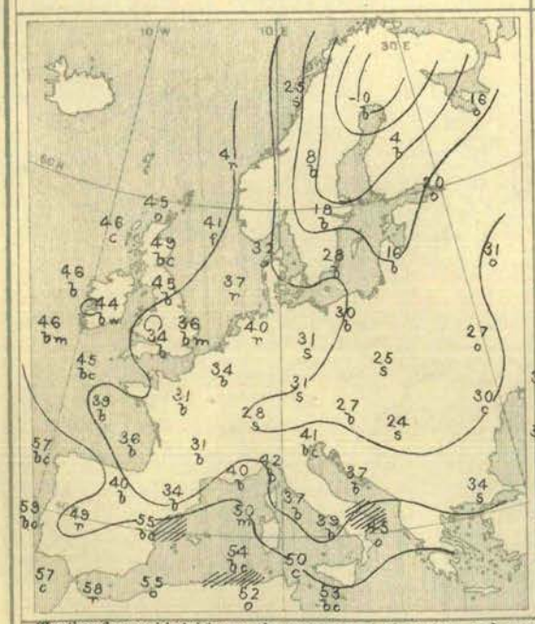


Wind fresh from the Eastward in the west of France, and light or moderate from the same quarter or from South-East in the south-west of our Islands; light from South or South-West on our extreme north-west coasts, and from West in the north and east of Great Britain. South-Westerly or Westerly in the northern parts of Scandinavia, but North-Westerly or Northerly over Denmark, Germany, the Netherlands, the Baltic, and the south of Scandinavia, and Westerly in Austria. Northerly or North-Easterly in Italy, variable in Algeria. No important change occurring during day.

Barometer highest, 30·4 ins. and upwards over England, the south-east of Ireland and the north of France, 30·1 ins. and upwards in an anticyclone covering the greater part of western Europe. Lowest, 29·1 ins. and less in a depression lying over the south of Russia; 29·7 ins. and less in another system lying over Lapland, 30·0 ins. and less in the south of Portugal. Slight fall of barometer taking place over western Europe during day, but general distribution of pressure remaining unchanged. Russian depresssion moving northwards to the central provinces.

Monday, 20th March.

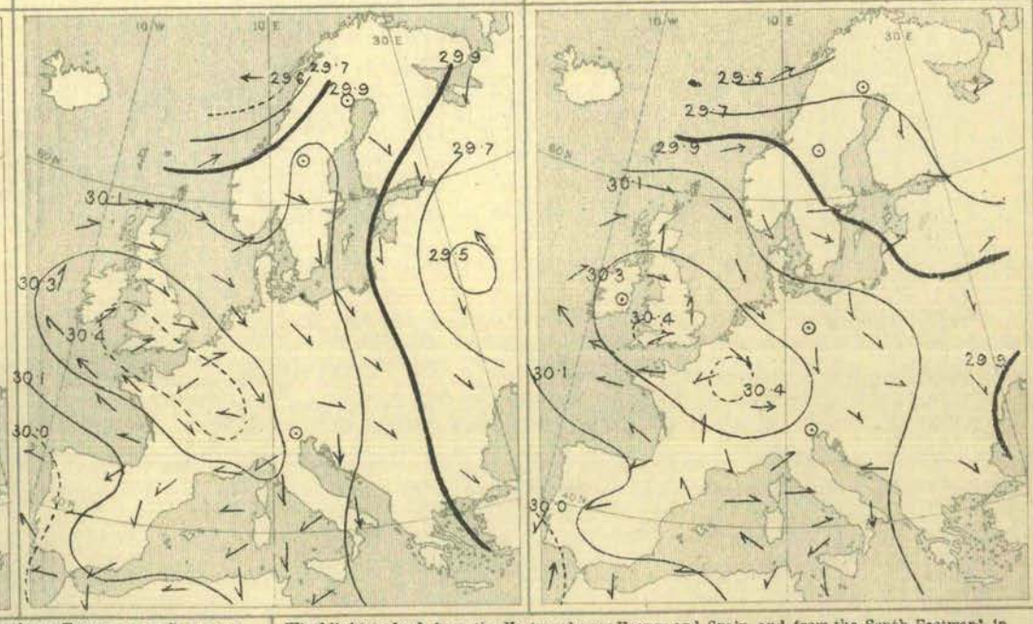
Temperature and Weather. 8 a.m.



Weather fine and bright over the greater part of western and southern Europe, as well as over Finland, Sweden, and the Baltic. Dull at most of the Russian stations, rainy in the south of Denmark, snow falling in many parts of Germany and Austria, as well as at Bodö. Dull in Algeria and central Spain, with rain at Madrid and Nemours. No important change occurring during day, but sky clearing in the west of Norway.

Temperature risen over our Islands, France, and the eastern shores of the North Sea, but fallen elsewhere. Morning readings highest, 60° at Bilbao, 59° at Lisbon, 58° at Nemours and Oran, and 57° at Corunna and San Fernando; above 50° at most of the Mediterranean stations, and very little below it in the east of Scotland. Lowest, – 10° Fahr. at Haparanda, – 4° at Uleaborg, + 4° at Kuopio, 5° at Hangö, 8° at Hernösand, 12° at Helsingfors; below the freezing point over nearly the whole of northern, eastern, and central Europe, as well as over central England. Rising during day to 55° or more in several parts of Great Britain, and reaching 60° at Loughborough; exceeding 60° at some of the western and southern French stations and also in Spain, but remaining below it in Italy. Frost occurring in many parts of Great Britain at night.

Barometer and Wind. 8 a.m. 6 p.m.



Wind light to fresh from the Eastward over France and Spain, and from the South-Eastward in the south-west of our Islands. Light Southerly or South-Westerly on our extreme north-western coasts, and from the Westward in the north and east of Great Britain. South-Westerly or Westerly in the west of Norway, but Easterly at Bodö. Northerly or North-Westerly over the Baltic and the greater part of Russia. North-Westerly or Westerly over Germany and Austria; Northerly in Italy and Algeria. No important change occurring during day.

Barometer highest, 30·4 ins. and upwards over England, the Netherlands, and the north-eastern parts of France; 30·1 ins. and upwards in an anticyclone covering nearly the whole of western, central, and southern Europe, with the greater part of the Mediterranean. Lowest, 29·5 ins. to 29·6 ins. in a depression lying off the north-west of Norway, and also in another system over central Russia; 29·95 ins. and less in a shallow disturbance off the south-west of Spain. Slight fall of barometer taking place over western Europe during day, and a more decided fall over the northern countries; depression over central Russia continuing to travel northwards.

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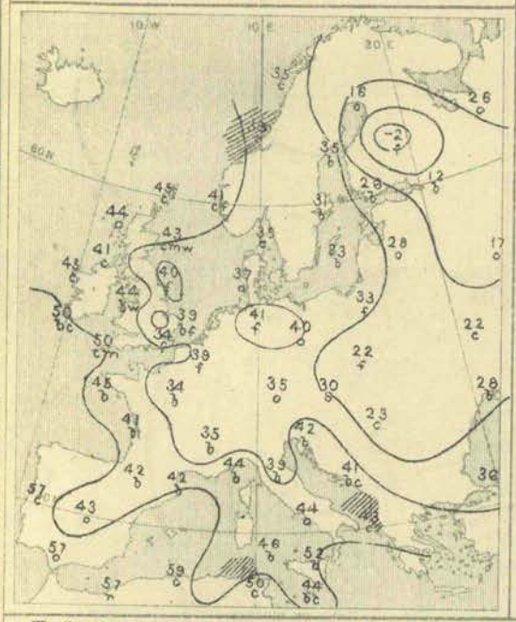
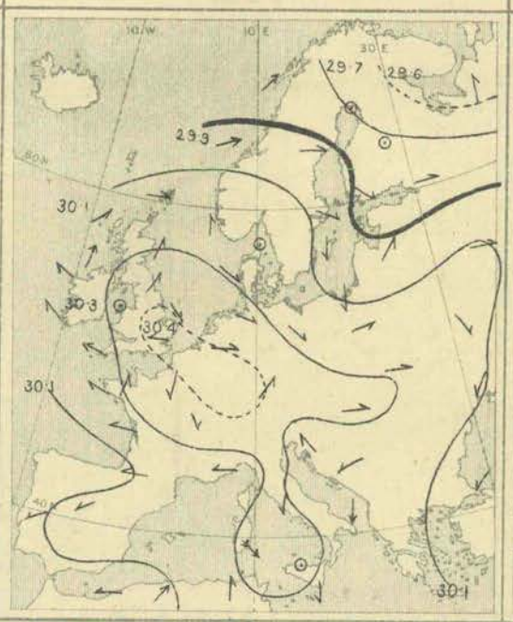
III.—SUMMARY OF WEATHER OVER EUROPE.

Tuesday, 21st March.

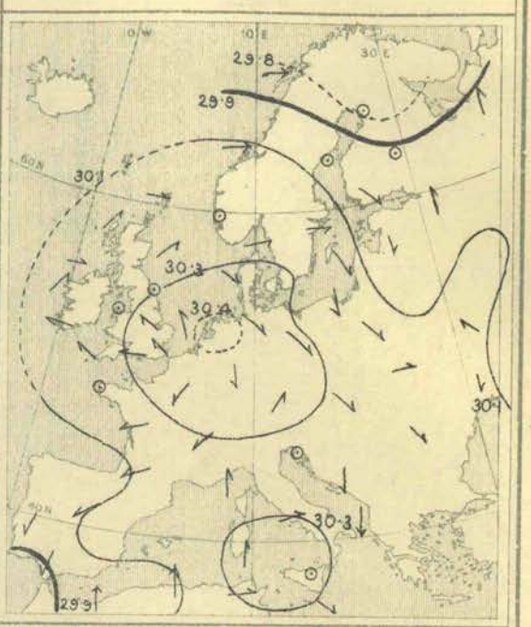
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fine over the greater part of the United Kingdom, France, and Italy, as well as over Finland and Sweden; local fogs reported over the south of Scotland and the north-east and south-east of England, as well as in the Netherlands. Rainy in the west of Norway; dull over the greater part of Russia, Germany, and Austria, with snow in places, dull also in Spain and Algeria with rain at Nemours. Weather clearing later in many parts of England, and remaining fair and dry over western Europe generally.

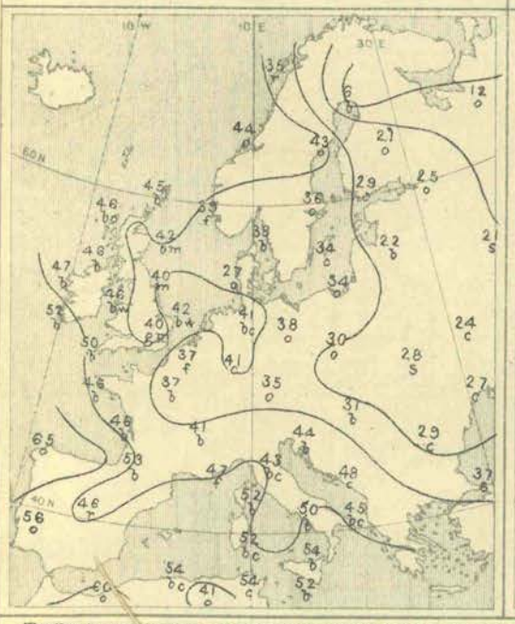
Temperature fallen in the north of our Islands and also in Spain and Russia, risen elsewhere. Morning readings highest, 60° at Oporto, 59° at Bilbao and Algiers, and 58° at Barcelona; above 50° over the western parts of the Mediterranean generally, and touching that point in the extreme south-west of our Islands. Lowest, − 2° Fahr. at Kuopio, + 12° at St. Petersburg, 13° at Uleaborg, and 16° at Haparanda; below the freezing point in many parts of Russia and Austria and also over central England. Rising during day to 60° or more at some of the English and Scotch stations. Exceeding 65° in the west of France and the southern parts of Spain and Italy, but remaining below 60° in the Riviera.

Wind light or moderate from the Eastward over Spain and the Bay of Biscay, and the English Channel, fresh from the South-Eastward on our extreme south-west coasts, light from the Southward or South-Westward in the north of our Islands, and strong from the same quarters in the west of Norway. North-Westerly or Northerly over Denmark, north Germany, and the Baltic; Westerly in Austria. Chiefly Northerly in Italy, but Southerly in Algeria. No important change occurring during day.

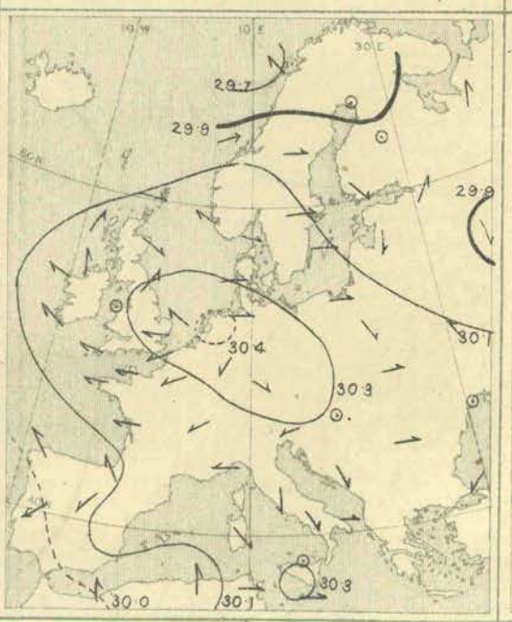
Barometer highest, 30·4 ins. and upwards over south-western Germany, Belgium, and the south-eastern parts of England; 30·1 ins. and upwards in an anticyclone covering all but the northern and extreme south-western parts of Europe. Lowest, 29·6 ins. and less in the neighbourhood of the White Sea. Slight fall of barometer taking place over the western countries during day, but general distribution of pressure remaining unchanged.

Wednesday, 22nd March.

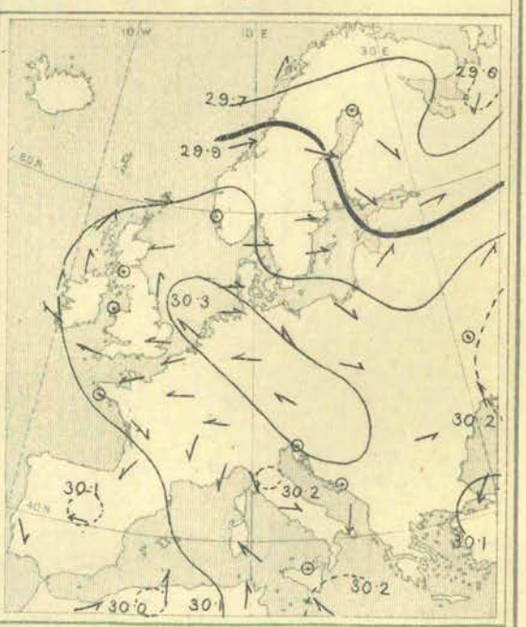
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright in nearly all parts of our Islands, France, Italy, and Austria, but with wet mists at several of the English and Scotch stations. Dull over the greater part of Scandinavia, Russia, and Germany, with rain at Bodö, and with snow at Moscow and Lemberg; dull also in Spain and Algeria, with rain at Madrid. Local mists over Great Britain dispersing later; rain falling in the north of Scandinavia; no change occurring elsewhere.

Temperature risen generally, but fallen in some parts of northern Russia. Morning readings highest, 65° at Corunna, 61° at Bilbao, 60° at Nemours and Oran, and 56° at Lisbon and San Fernando; above 50° on the Spanish coasts and over the western parts of the Mediterranean, as well as in the extreme south-west of our Islands. Lowest, 6° at Haparanda, 12° at Archangel and Uleaborg, and 21° at Kuopio, Moscow, and Kharkov, below the freezing point over Russia and Austria generally, and also over central England. Rising later to 60° or more in several parts of the United Kingdom, and reaching 64° at Loughborough, exceeding 65° in the west of France, but remaining below that level in most parts of Spain and Italy. Frost again experienced over Great Britain at night.

Wind light or moderate from the Eastward over France, Spain, and the southern parts of England, and from the South-Eastward in Ireland, light from the South-Westward in the north of Scotland, and from West in Denmark and the south of Scandinavia. North-Westerly over the greater part of the Baltic Provinces, Germany, and Italy, light and variable in Russia. Moderate from the Southward in Algeria. No important change occurring during day.

Barometer highest, 30·4 ins. and upwards over Holland, 30·1 ins. and upwards in an anticyclone covering all but the extreme northern and north-eastern and the extreme south-western parts of Europe. Lowest, 29·7 ins. and less in a depression lying off the north-west of Norway, 29·9 ins. and less in another disturbance lying over central Russia. Slight fall of barometer taking place over western Europe during day, and rather decided fall over northern Russia, but general distribution of pressure remaining unchanged.

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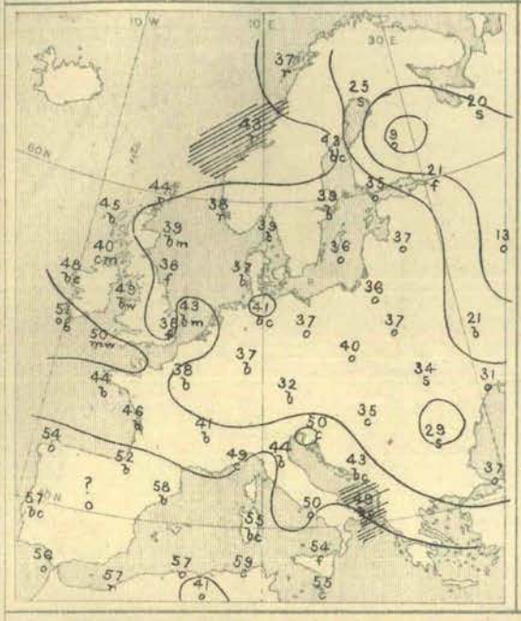
III.—SUMMARY OF WEATHER OVER EUROPE.

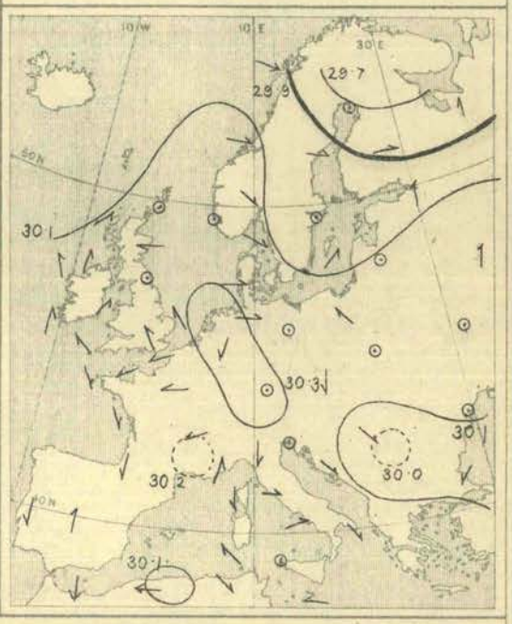
Thursday, 23rd March.

Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.

Barometer and Wind. 6 p.m.



Weather in morning fine in nearly all parts of western and southern Europe, but with fog or haze in many parts of the United Kingdom. Dull in most parts of the northern, eastern, and central countries, with rain in the west of Norway, and with snow in Lapland, as well as at Lemberg and Hermanstadt. Fog clearing over our Islands later, and weather becoming fine in nearly all parts of Europe.

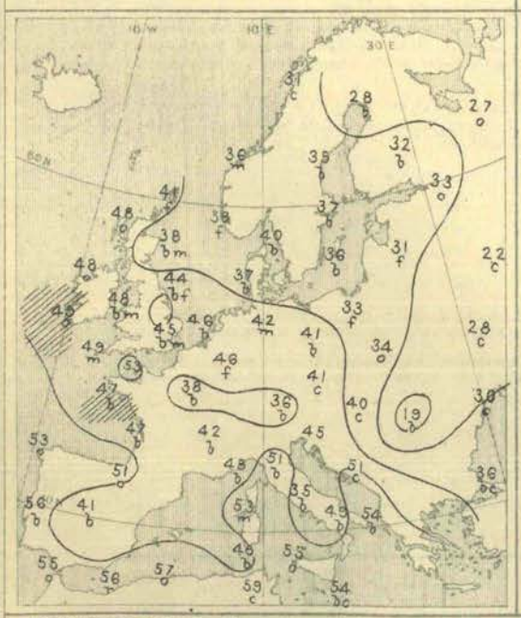
Temperature fallen in the north of our Islands, risen over Sweden, the Baltic, eastern Germany, and Austria, changed irregularly elsewhere. Morning readings highest, 59° at La Calle, 58° at Barcelona, and 57° at Lisbon, Nemours, and Algiers; reaching 50° or more in the extreme south-west of Ireland and over the western parts of the English Channel. Lowest, 9° at Kuopio, 13° at Moscow, 20° at Archangel, and 21° at St. Petersburg and Kiev, below the freezing point at most of the Russian stations and also over central England. Rising during day to 60° and upwards in many parts of our Islands and France, and reaching 67° at Loughborough. Frost occurring over Great Britain at night.

Wind light from the Eastward or South-Eastward over the greater part of England, Ireland, and France, calm in the north of Scotland; light from the Westward on our north-east coasts. South-Westerly or Westerly in Scandinavia, strong to a gale in the west of Norway. Light from the Westward or North-Westward over Denmark, Germany, and Austria; variable in Russia; North-Easterly in Spain and Italy. No important change occurring during day.

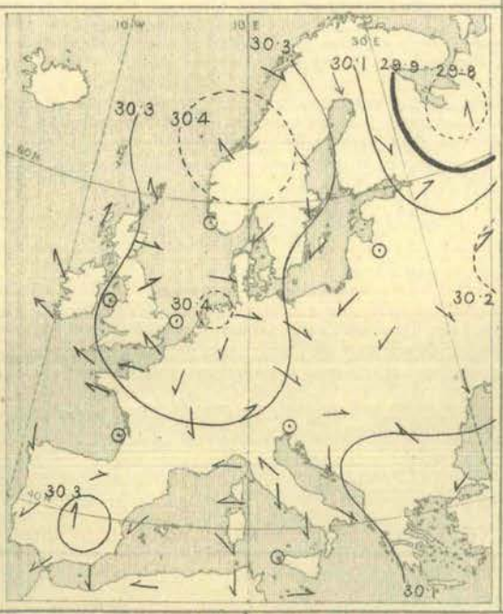
Barometer highest, 30·10 ins. to 30·35 ins. in an anticyclone covering all but the most northern parts of Europe. Lowest, 29·6 ins. and less in a depression moving eastwards across Lapland. No decided change occurring over western Europe later, but shallow depression appearing over Transylvania in evening.

Friday, 24th March.

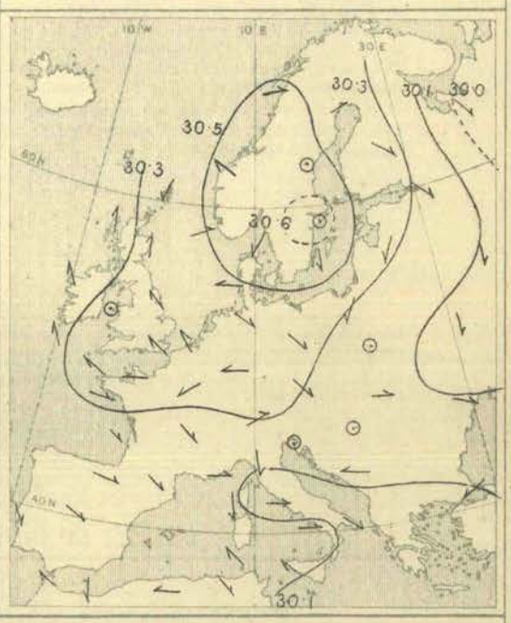
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fine and dry over the greater part of our Islands and the Continent, but dull in the west of Ireland, hazy in many parts of Great Britain, and foggy in the north of England, as well as over the Netherlands, the south of Norway, and the southern shores of the Baltic. Cloudy or overcast over the central and southern parts of Russia, as well as in Algeria and the south of Spain, with rain at Nemours and Oran. Rain falling later at Valencia (Ireland); weather remaining fine in nearly all other parts of Europe, but snow falling in some parts of southern Russia.

Temperature risen in Russia, but changed slightly and irregularly elsewhere. Morning readings highest, 59° at La Calle, 57° at Algiers, and 56° at Lisbon and Oran, reaching 50° or more over the western parts of the English Channel. Lowest, 19° at Hermanstadt, 22° at Moscow, 25° at Lemberg, and 27° at Archangel and Kharkov; below the freezing point at most of the Russian stations, and equal to it at York and Loughborough. Rising during day to 60° and upwards in many parts of the United Kingdom and France, reaching 69° at Loughborough and Cambridge, and 72° at Belfort. Frost occurring over Great Britain at night.

Wind light from the Eastward over the south of England and the north of France, from the South-Eastward in Ireland, and from the Southward in the north of Scotland; variable in the east of England and also on the eastern shores of the North Sea. Northerly or North-Westerly in Finland and Sweden, as well as at many of the Russian, German, and Italian stations. Variable over the southern parts of France, North-Easterly in Spain and Algeria. No important change occurring during day, but sea breezes setting in along the west coast of France.

Barometer highest, 30·4 ins. and upwards over Scandinavia and also over the Netherlands, 30·1 ins. and upwards over Europe generally, but as low as (1) 29·8 ins. and less in a depression lying in the neighbourhood of the White Sea, and (2) 30·0 ins. and less in another system over the south of Russia. General rise of barometer taking place during day over western and northern Europe, and readings exceeding 30·5 ins. over Scandinavia.

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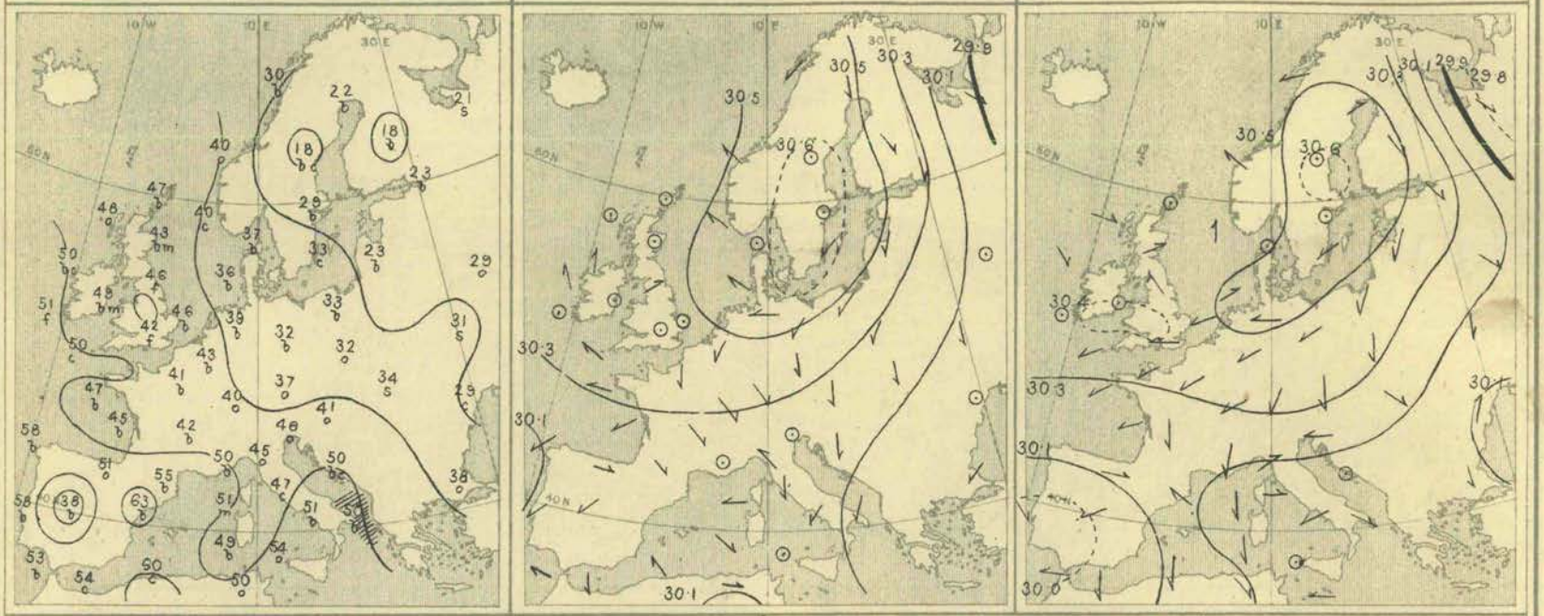
III.—SUMMARY OF WEATHER OVER EUROPE.

Saturday, 25th March.

Temperature and Weather. — 8 a.m.

Barometer and Wind. — 8 a.m. | 6 p.m.



Weather fine over the greater part of western, northern, and southern Europe, but with haze or fog at several of our own stations. Dull in the eastern and central countries, with snow at Lemberg and Kiev, and also at Archangel. Slight rain falling later at one or two of the Scotch stations, but weather remaining fine and dry in nearly all other parts of Europe.

Temperature fallen several degrees over Sweden and northern Russia, but changed irregularly elsewhere. Morning readings highest, 63° at Barcelona, 60° at Algiers, and 58° at Corunna and Lisbon; above 50° at several of the Mediterranean stations, and also on the extreme south-west coasts of our Islands. Lowest, 13° at Uleaborg, 18° at Kuopio, 19° at Haparanda, 21° at Archangel, and 22° at Haparanda; below the freezing point over Sweden and Russia generally, and very little above it over central England. Rising during day to 65° or more over the inland parts of England, and reaching 69° at Loughborough, exceeding 70° in the west of France, but remaining below it in Spain and below 65° in Italy. Frost again occurring over central England at night.

Wind light or moderate from the North-Eastward over the greater part of central and southern Europe, from the Eastward over the English Channel and the Bay of Biscay, and from the South-Eastward in Ireland. Calm or light and variable over the northern, eastern, and central parts of Great Britain, light from the South-Eastward on the eastern shores of the North Sea, calm in Sweden, Northerly or North-Westerly over northern Russia. No important change occurring during day, but wind becoming variable in Italy.

Barometer highest, 30·6 ins. and upwards over the southern parts of Sweden, 30·1 ins. and upwards in an anticyclone covering nearly the whole of Europe and the Mediterranean. Lowest, 29·9 ins. and less in a shallow depression moving eastwards across northern Russia. Slight fall of barometer occurring in most places during day, but general distribution of pressure remaining unchanged. Depression over northern Russia becoming somewhat deeper towards evening.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force is indicated thus: ⟿ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the left-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Germany, Sweden, and Norway, and 7 a.m. in France, Algeria, Italy, Austria, and Russia; that for 6 p.m. is prepared from observations made at 6 p.m. in the British Islands and France, 7 p.m. in Algeria, 8 p.m. in Sweden and Norway, Germany, and Austria, and 9 p.m. in Russia, Belgium, and Italy. The time indicated in each case is the standard time for each country.

GENERAL NOTES.

During this period a large anticyclone has embraced nearly the whole of Europe, its central portion being found at first over Ireland, England, and France, afterwards over Germany and the North Sea, and finally over Scandinavia. Fine dry weather has consequently prevailed in most countries, with high day temperatures, but with cold nights, especially over the inland parts of Great Britain, where the diurnal range of temperature has been very large.

In the extreme northern and north-eastern parts of Europe the conditions have been affected by a series of depressions moving eastwards along the north coasts of Norway and Russia. These disturbances have occasioned strong Westerly winds at times in Scandinavia, with frequent falls of snow over the most northern and eastern parts of the Continent generally.

BRIGHT SUNSHINE Values for the Week in addition to those found on page 68.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	44·2	?	52	?	EASTBOURNE	75·0	?	88	?
OSWALDKIRK (Yorkshire)	61·4	?	72	?	TENBY	34·1	?	42	?
WORKSOP	56·7	+33·3	67	+39	NEWQUAY	68·0	?	80	?
THURCASTON (Leicestershire)	67·4	+46·2	79	+54	TORQUAY	70·1*	?	81*	?
MARGATE	64·4	?	76	?	ARLEY COTTAGE (County Cavan)	47·2	?	56	?
WESTBOURNE (Sussex)	73·6*	?	87*	?	GUERNSEY	76·3*	?	90*	?
BRIGHTON	66·7	?	78	?					

* The values at Westbourne, Tenby, Torquay, and Guernsey are obtained by Jordan's Photographic Recorder.

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WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; R. H. SCOTT, F.R.S., SECRETARY.

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VOL. X. No. 13.] *Third Series.* WEEK ENDING SATURDAY, 1ST APRIL, 1893. [*Price 6d.* [*Annual Subscription post paid*, £1 10*s.* 0*d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871-90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the twenty-five years 1866-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the ten years 1881-90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

	DISTRICTS. (See p. 74.)	Observed during the Week. Highest.	Observed during the Week. Lowest.	Averages of Daily Maxima.	Averages of Daily Minima.	Averages of Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 1st, 1893. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	64	27	51·5	37·2	44·1	4 above.	35	+23	13	−18	153	+ 60	437	+ 2
	1. SCOTLAND, EAST	63	23	52·9	35·2	43·8	3 above.	41	+22	19	−13	192	+ 51	490	+15
	2. ENGLAND, N.E.	65	25	54·2	36·9	45·3	4 above.	45	+27	14	−15	225	+ 88	388	−41
	3. ENGLAND, EAST	71	25	60·3	32·7	46·1	3 above.	68	+43	26	− 6	293	+125	477	− 7
	4. MIDLAND COUNTIES	68	21	61·6	32·1	46·4	4 above.	72	+46	28	− 3	327	+142	451	−20
	5. ENGLAND, SOUTH	71	26	59·7	37·0	48·3	4 above.	63	+37	14	−11	302	+ 99	353	−19
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	64	28	54·6	38·1	46·1	4 above.	45	+28	11	−12	217	+ 75	327	−25
	7. ENGLAND, N.W.	68	31	57·3	39·8	46·3	5 above.	53	+34	6	−18	247	+105	299	−60
	8. ENGLAND, S.W.	71	28	58·1	39·4	48·5	5 above.	56	+33	7	−12	328	+100	234	−46
	9. IRELAND, NORTH	66	33	54·4	40·2	47·1	4 above.	43	+20	5	−15	264	+ 62	242	−68
	10. IRELAND, SOUTH	65	29	56·3	40·9	48·4	4 above.	49	+22	3	−14	353	+ 68	163	−76
	—CHANNEL ISLANDS	66	39	58·9	45·0	51·8	6 above.	69	+41	0	7	436	+147	70	−47

Rainfall.

	DISTRICTS. (See p. 74.)	For the Week. Number of Rainy Days.	Total Fall.	More or less than the mean for the Week.	From Jan. 1st, 1893. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	3	3	4 less.	65	−1	13·1	− 0·8
	1. SCOTLAND, EAST	1	less than ½	5 less.	51	+1	5·9	− 1·7
	2. ENGLAND, N.E.	1	less than ½	4 less.	44	−2	4·6	− 0·9
	3. ENGLAND, EAST	0	—	4 less.	49	+3	5·1	− 0·3
	4. MIDLAND COUNTIES	1	less than ½	4 less.	48	+4	4·9	− 1·5
	5. ENGLAND, SOUTH	0	—	4 less.	48	+4	6·1	− 0·6
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	2	2	5 less.	57	+2	9·8	− 4·2
	7. ENGLAND, N.W.	1	1	4 less.	49	−1	6·4	− 1·6
	8. ENGLAND, S.W.	1	1	5 less.	49	−2	8·8	− 1·6
	9. IRELAND, NORTH	2	2	3 less.	59	+1	7·9	− 1·0
	10. IRELAND, SOUTH	1	1	5 less.	50	−4	8·7	− 1·8
	—CHANNEL ISLANDS	1	1	4 less.	56	−1	7·4	− 1·2

Bright Sunshine.

	DISTRICTS. (See p. 74.)	For the Week. Hour recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 1st, 1893. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	31	+ 8	35	+ 7	176	− 8	21	− 1
	1. SCOTLAND, EAST	36	+ 7	40	+ 5	256	+ 25	30	+ 3
	2. ENGLAND, N.E.	37	+ 10	42	+11	266	+ 67	30	+ 8
	3. ENGLAND, EAST	63	+ 33	72	+36	308	+ 70	34	+ 8
	4. MIDLAND COUNTIES	52	+ 26	59	+29	295	+ 84	33	+ 10
	5. ENGLAND, SOUTH	67	+ 35	76	+36	308	+ 89	34	+ 10
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	32	+ 5	36	+ 5	242	+ 44	27	+ 5
	7. ENGLAND, N.W.	42	+ 17	47	+18	237	+ 38	27	+ 4
	8. ENGLAND, S.W.	57	+ 23	65	+26	330	+ 75	36	+ 9
	9. IRELAND, NORTH	25	0	29	0	215	+ 9	24	+ 1
	10. IRELAND, SOUTH	32	0	37	0	244	+ 7	27	− 1
	—CHANNEL ISLANDS	74	+ 35	85	+40	369	+ 58	40	+ 6

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather continued extremely dry, fine, and bright over the greater part of the Kingdom until towards the end of the period, when the sky became less clear generally, and slight rain fell over many of the northern and western parts of the Kingdom.

Temperature was again very high during the daytime and low at night; the average values for the week ranged from 3° above the mean in Scotland E. and England E., to 4° in most other districts, to 5° in England N.W. and S.W., and to 6° in the Channel Islands. The highest of the maxima were registered on April 1st at most of the English stations and on earlier dates in Ireland and Scotland; they ranged from 63° to 64° in Scotland, from 65° to 66° in Ireland, and from 65° to 71° over England. The lowest of the minima were recorded, as a rule, on March 29th, when they varied from 21° in the Midland Counties (at Stamford), and from between 23° and 28° in most of the other districts to 31° in England N.W., 33° in Ireland N., and 39° in the Channel Islands. The diurnal range of temperature during the middle part of the week was again unusually large, amounting over some of the inland parts of England to more than 40°.

Rainfall was again altogether absent from the east and south of England, and was very slight elsewhere: over the central and northern parts of England the fall was less than five-hundredths of an inch, but in the western parts of the Kingdom one or two-tenths, and in Scotland N. three-tenths of an inch were measured.

Bright Sunshine was again very prevalent, although it showed a considerable decrease on that recorded during the preceding week. The percentage of the possible duration ranged from 29 to 37 in Ireland, from 35 to 40 in Scotland, and from 42 to 76 in England. In the Channel Islands the percentage was as high as 85.

Barometer and Wind.—During the earlier part of the week an anticyclone was observed to the eastward of our Islands and the winds experienced were light from between North-East and East. As the week progressed, the anticyclone became of less intensity and moved slowly southwards, and depressions appeared off our north-western coasts. Towards the end of the time a small disturbance moved south-eastwards over the south-west of England, causing slight rain in that locality. This, however, was succeeded by a new anticyclone advancing from the westward, and the winds, after blowing from the Southward and South-Westward for a short time, shifted to North-West and North.

ERRATUM.—In the General Remarks given in last week's report, p. 67, under heading "*Bright Sunshine*," for "1881 read 1880."

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II.—DATA from which the SUMMARY on page 73 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.)								Rainfall.			Bright Sunshine.			
		Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°				Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	50	35	46·9	37·4	42·0	+2·9	14	13	4	0·08	−0·47	*	*	*	*
	Stornoway	52	33	50·1	36·6	43·2	+2·5	31	15	3	0·08	−0·67	33·9	+ 8·4	38	+ 7
	Wick	54	27	49·7	36·4	42·9	+2·1	30	16	2	0·07	−0·32	*	*	*	*
	Lairg 𝔖	63	24	53·6	34·9	44·0	+4·4	44	20	3	0·09	−0·49	*	*	*	*
	Glencarron 𝔖	64	30	53·3	36·4	44·6	+4·5	42	16	4	0·96	−0·32	*	*	*	*
	Fort Augustus 𝔖	54	28	51·0	37·6	44·1	+3·2	33	12	3	0·26	−0·27	22·6	?	25	?
	Fort William 𝔖	59	33	55·6	41·3	48·2	+6·1	46	2	4	0·60	−0·48	37·3	?	42	?
1. SCOTLAND, E.	Nairn	59	24	52·0	34·3	42·9	+1·7	39	22	1	0·02	−0·34	*	*	*	*
	Aberdeen	57	29	51·7	37·6	44·4	+3·5	35	12	0	—	−0·50	33·6	+ 4·9	38	+ 5
	Braemar 𝔖	58	23	52·2	31·3	41·4	+3·6	29	42	2	0·04	−0·51	43·7†	?†	49†	?†
	Ochtertyre 𝔖	63	28	56·3	35·6	45·6	+4·5	52	18	1	0·03	−0·55	*	*	*	*
	Leith	59	32	51·9	35·7	43·6	+0·9	38	18	2	0·05	−0.30	*	*	*	*
	Marchmont 𝔖	61	29	53·0	36·7	44·6	+4·2	40	15	2	0·06	−0·51	33·0	?	37	?
2. ENGLAND, N.E.	Alnwick Castle	—	—	—	—	—	—	—	—	1	0·02	−0·50	*	*	*	*
	Durham	65	30	56·0	36·0	45·7	+4·4	51	17	1	0·03	−0·49	35·9	+10·0	40	+11
	Shields	64	31	53·0	36·9	44·7	+3·0	40	14	1	0·02	−0·42	*	*	*	*
	Scarborough 𝔐												*	*	*	*
	York	65	25	58·9	34·3	46·2	+3·5	62	22	2	0·09	−0·31	34·9	+ 9·6	39	+11
	Spurn Head	62	38	51·4	39·4	45·2	+3·4	33	7	1	0·05	−0·25	*	*	*	*
3. ENGLAND, E.	Hillington 𝔐	67	30	62·1	33·0	47·1	+4·3	74	25	0	0·01‡	−0·37	55·0	+27·5	63	+32
	Yarmouth	60	38	51·3	40·0	45·5	+4·0	33	6	0	—	−0·40	*	*	*	*
	Geldeston	68	25	59·0	30·4	44·3	+1·1	65	32	0	—	−0·32	67·8	+35·0	77	+40
	Cambridge	71	26	66·9	30·4	48·1	+4·9	91	32	0	—	−0·35	63·0	+31·3	72	+38
	Rothamsted	67	27	62·0	29·8	45·4	+2·9	75	34	0	—	−0·40	65·9	?	75	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	66	22	62·4	31·7	46·6	+3·8	75	29	1	0·02	−0·34	*	*	*	*
	Loughborough	61	24	63·6	20·7	46·1	+2·6	80	34	0	—	−0·40	*	*	*	*
	Stamford (Ketton Hall)	67	21	63·3	27·1	44·7	+1·5	81	42	0	—	−0·42	*	*	*	*
	Cheadle 𝔐	64	36	58·6	38·6	48·3	+6·8	58	10	2	0·08	−0·40	*	*	*	*
	Churchstoke 𝔐	64	28	58·5	33·4	45·6	+4·0	61	24	2	0·07	−0·35	46·5	+18·7	53	+22
	Hereford 𝔐	66	28	61·4	33·1	46·8	+3·0	71	25	1	0·02	−0·38	*	*	*	*
	Cirencester	64	27	61·6	29·9	45·4	+3·6	75	34	1	0·03	−0·45	56·4	+28·4	64	+32
	Oxford	67	30	63·3	33·1	47·8	+4·2	78	25	0	—	−0·39	63·4	+34·4	72	+39
5. ENGLAND, S.	London	71	30	64·3	34·9	49·2	+4·7	80	20	0	—	−0·38	49·3†	+25·8†	56†	+30†
	North Foreland	60	40	53·4	41·9	47·5	+4·7	39	0	0	—	?	*	*	*	*
	Strathfield Turgiss 𝔐	69	26	64·3	28·8	46·0	+2·3	83	37	0	—	−0·36	*	*	*	*
	Dungeness	59	34	54·6	37·7	45·9	+3·0	45	12	0	—	−0·43	*	*	*	*
	Hastings (St. Leonards)	63	38	58·4	42·0	49·9	+5·2	55	0	0	—	−0·47	71·7	+36·7	81	+41
	Southampton	66	33	62·9	35·2	48·6	+3·4	75	19	0	—	−0·46	67·3	+33·6	76	+38
	Hurst Castle	63	36	58·3	38·9	48·3	+4·4	57	9	0	—	−0·39	*	*	*	*
	Stowell 𝔐	64	34	61·6	36·8	48·8	+5·7	69	15	0	—	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	60	39	57·3	40·3	48·6	+6·0	53	5	4	0·58	−0·72	*	*	*	*
	Glasgow	60	32	52·8	39·0	45·7	+4·2	39	8	1	0·20	−0·34	26·4	+ 4·4	30	+ 5
	Ardrossan	60	33	52·7	38·3	45·3	+2·7	39	10	1	0·23	−0·29	*	*	*	*
	Glenlee 𝔖	64	28	57·2	32·8	44·6	+4·1	57	26	1	0·11	−0·70	*	*	*	*
	Douglas (Isle of Man)	58	36	53·1	39·9	46·3	+3·6	39	6	1	0·05	−0·56	37·2	+ 4·7	42	+ 5
7. ENGLAND, N.W.	Newton Reigny	62	31	57·1	36·6	46·6	+5·8	55	15	1	0·02	−0·43	47·5	+20·3	53	+22
	Stonyhurst	61	35	55·7	38·2	46·7	+4·8	49	11	2	0·13	−0·55	42·8	+17·5	48	+19
	Blackpool 𝔐	64	36	56·9	39·8	47·8	+5·4	52	8	0	—	−0·49	37·7	+12·2	42	+13
	Manchester	65	36	59·3	38·9	48·8	+6·2	61	9	1	0·25	−0·26	40·9	?	47	?
	Liverpool Obsy. (Bidston)	64	36	57·7	40·1	48·6	+4·9	54	5	2	0·03	−0·35	*	*	*	*
	Llandudno 𝔐	68	38	58·2	42·4	50·1	+5·4	57	0	1	0·02	−0·41	38·7	+14·2	44	+17
	Holyhead	64	40	56·0	43·1	49·4	+5·2	52	0	1	0·01	−0·47	*	*	*	*
8. ENGLAND, S.W.	Llandovery	71	28	62·4	32·3	46·9	+3·3	75	27	2	0·10	−0·63	*	*	*	*
	Pembroke	57	42	52·7	43·3	47·9	+4·0	41	0	2	0·10	−0·40	39·3	+ 5·1	45	+ 5
	Arlington (N. Devon)	64	33	60·4	38·4	49·1	+6·4	65	10	2	0·06	−0·64	*	*	*	*
	Cullompton 𝔐	67	31	62·9	33·4	47·7	+3·9	76	24	1	0·05	−0·47	62·7	+32·0	71	+36
	Falmouth	58	41	54·5	43·5	48·8	+3·6	48	0	1	0·03	−0·72	59·5	+25·5	68	+29
	Plymouth	60	37	57·6	41·1	49·1	+3·7	53	3	1	0·05	−0·54	64·2	+30·2	73	+35
	Prawle Point	60	42	56·4	44·0	50·0	+6·3	56	0	1	0·08	−0·41	*	*	*	*
9. IRELAND, N.	Malin Head	60	40	51·3	42·7	46·9	+3·7	34	0	2	0·25	?	*	*	*	*
	Londonderry	65	37	35·0	40·5	47·5	+3·7	45	4	2	0·62	+0·05	*	*	*	*
	Edenfel (Omagh)	63	37	54·1	39·9	46·8	+4·5	42	6	3	0·22	−0·30	*	*	*	*
	Mullaghmore												*	*	*	*
	Belmullet	61	41	54·3	43·4	48·7	+2·8	47	0	3	0·12	?	*	*	*	*
	Markree Castle	64	33	55·8	38·1	46·7	+3·7	49	11	1	0·19	−0·34	27·8	0·0	31	0
	Brookeborough	66	36	55·4	38·5	46·7	+4·8	48	10	2	0·28	−0·33	*	*	*	*
	Armagh	61	33	55·0	37·7	46·1	+4·1	47	12	2	0·18	−0·30	22·7	− 2·0	26	−2
	Donaghadee	56	39	52·7	41·7	47·0	+3·8	36	1	1	0·15	−0·30	*	*	*	*
	Edgeworthstown	64	35	56·0	38·9	47·2	+5·4	49	9	1	0·19	−0·41	*	*	*	*
10. IRELAND, S.	Dublin	65	37	56·5	42·5	49·3	+4·6	51	0	1	0·02	−0·46	30·1	− 0·9	34	− 1
	Parsonstown	62	35	56·9	39·4	47·9	+4·3	52	7	1	0·04	−0·48	29·2	− 1·5	33	− 1
	Kilkenny	61	30	56·3	37·1	46·4	+2·4	50	14	1	0·03	−0·46	*	*	*	*
	Waterford	58	29	55·3	36·5	45·6	+0·8	48	15	1	0·18	−0·47	*	*	*	*
	Roche's Point	55	40	53·3	42·9	48·0	+2·4	42	0	1	0·01	−0·77	*	*	*	*
	Valencia	63	40	56·4	44·9	50·5	+4·4	60	0	2	0·22	−0·65	37·7	+ 3·0	43	+ 4
	Killarney	65	34	58·4	42·5	50·2	+5·1	57	0	2	0·22	?	*	*	*	*
	Foynes	65	37	57·1	41·4	49·0	+4·4	52	2	1	0·12	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	59	46	55·1	47·0	50·9	+4·5	62	0	2	0·13	−0·39	*	*	*	*
	Jersey	66	39	62·7	43·0	52·6	+6·4	74	0	0	—	−0·49	73·6	+34·9	84	+40

Stations marked 𝔐 are in connection with the Royal Meteorological Society, and those marked 𝔖 with the Scottish Meteorological Society.

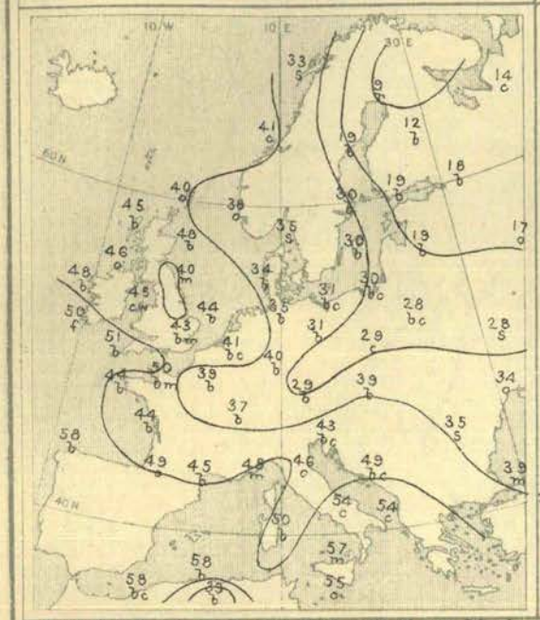
* An asterisk is inserted in all places for which the information is not usually received.

† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

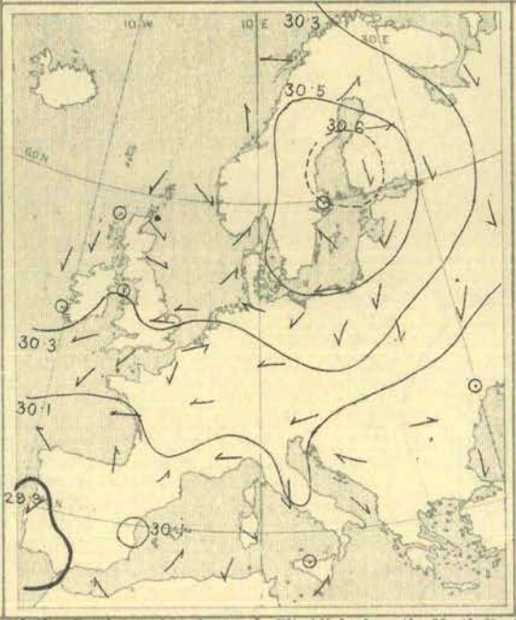
‡ Wet Fog.

Sunday, 26th March.

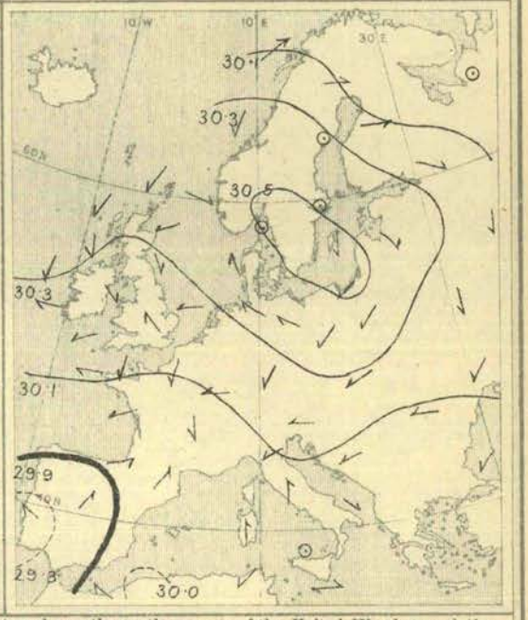
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fine and bright over most parts of our Islands and the Continent, but foggy in the Shetlands, the south of Ireland, and the north of England. Snow falling in Denmark, the north of Norway, and the south of Russia, as well as at Hermanstadt. Slight rain later at some of our own north-eastern stations, solar and lunar halos very general over the southern parts of England and the Channel, aurora in far north, but weather remaining fair and dry over western Europe as a whole.

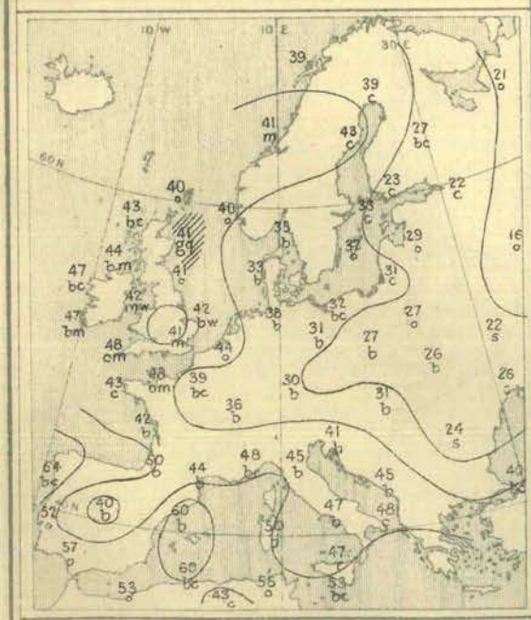
Temperature fallen a little in most places. Morning readings highest, 59° at Barcelona, 58° at Corunna, Nemours, and Algiers, and 57° at San Fernando and Palermo, above 50° at most of the Mediterranean stations, and in the extreme south-west of England. Lowest, 9° at Haparanda, 10° at Uleaborg, 12° at Kuopio, 14° at Archangel, and 17° at Moscow; below the freezing point over the greater part of Sweden and Russia, as well as at several of the Danish and German stations, and very little above it in some parts of central England. Daily maxima over our Islands somewhat lower than of late, but thermometer reaching 60° at York, Oxford, and Cambridge only. Exceeding 60° in Italy, France, and Spain.

Wind light from the North-Eastward over the southern parts of the United Kingdom and the greater part of central and southern Europe, but Northerly or North-Westerly in Italy, and Southerly in Algeria. Calm, or light from North-West, in the north of our Islands, variable over Scandinavia and northern Russia; light from the South-Westward in Denmark, North-Easterly breeze spreading to our northern coasts later, and a moderate gale from South-West setting in at Bodö. No important change occurring elsewhere.

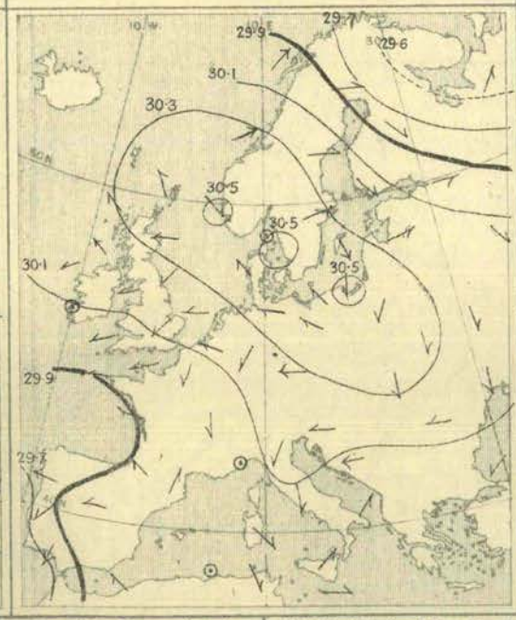
Barometer highest, 30·6 ins. and upwards over the southern parts of the Gulf of Bothnia, 30·1 ins. and upwards in an anticyclone covering all but the extreme south-western, southern, and south-eastern parts of Europe. Lowest, 29·9 ins. and less in a shallow depression lying off the south-west of Spain, 30·0 ins. and less over the south of Russia. Fall of barometer taking place over western and south-western Europe and also over Finmark during day, but relative distribution of pressure remaining little changed.

Monday, 27th March.

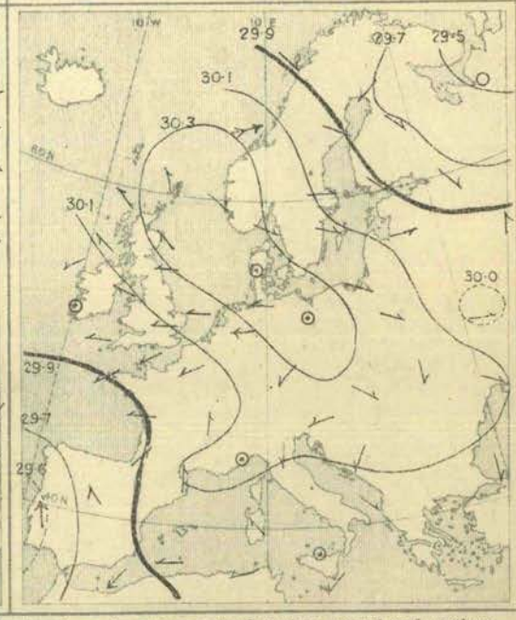
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather remaining fine over the greater part of western, central, and southern Europe, hazy in many parts of the United Kingdom, and dull in the east of Scotland, with rain at Leith. Cloudy or overcast at most of the Scandinavian and Russian stations, with rain at Bodö, snow at Kiev, as well as at Hermanstadt. No important change occurring in our Islands during day, but solar and lunar halos again observed over the south of England. Heavy rain at Funchal (Madeira).

Temperature risen briskly over Sweden and northern Russia, fallen in most other localities. Morning readings highest, 64° at Oporto, 62° at Bilbao, 60° at Barcelona and Algiers, and 57° at San Fernando and Oran; above 50° over the western parts of the Mediterranean generally, but below it over Italy and the Adriatic. Lowest, 16° at Moscow, 19° at Kharkov, 21° at Archangel and Helsingfors, and 22° at St. Petersburg and Kiev. Below the freezing point in most parts of Russia, Germany, and Austria, very little above it over central England. Rising later to 60° at Jersey and 63° at Cambridge, and to 65° in the west and south of France.

Wind light to fresh from the Eastward over the greater part of western, central, and southern Europe, calm in the south of France, and South-Westerly in the south of Italy. Westerly or South-Westerly over Scandinavia and northern Russia, strong South-Westerly in the west of Norway; light from the Northward over Austria and the south of Russia. No great change during day, but wind increasing to a fresh gale from West-South-West at Christiansund.

Barometer highest, 30·5 ins. to 30·3 ins. in an anticyclone lying over the North Sea, Denmark, the south of Scandinavia, and the northern and eastern parts of Germany. Lowest, 29·6 ins. and less in a depression over the White Sea; 29·7 ins. and less in another system lying off the south-west of Spain; 29·9 ins. and less in a third lying over the south of Russia. No important change occurring over western Europe during day, but barometer falling a little in most places.

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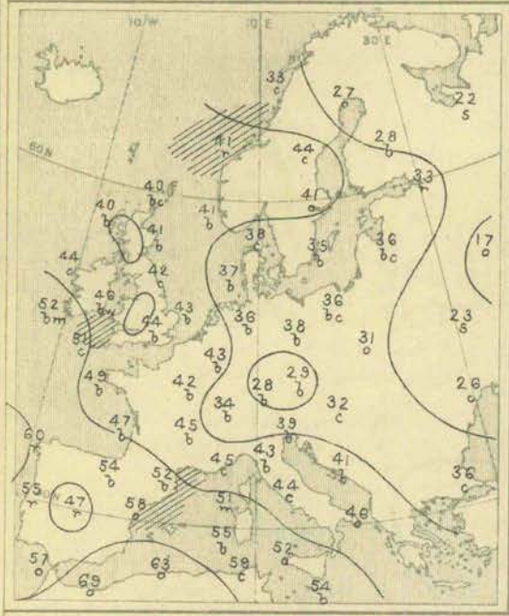
Tuesday, 28th March.

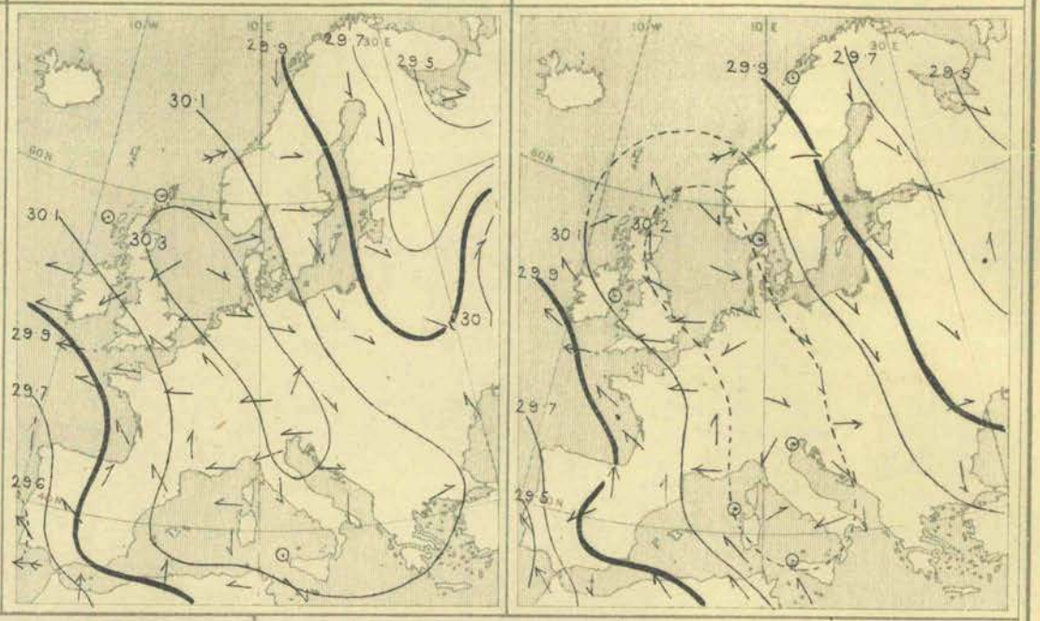
Temperature and Weather. 8 a.m.



Weather in morning continuing fine and bright over almost the whole of central Europe and the British Islands, dull and unsettled over the northern and south-western counties, rainy over the Spanish Peninsula, and also in some part of Norway and Finland, snow falling at Kiev. Considerable rain at Lisbon and Perpignan later, and nearly 0·2 inch at Christiansund; weather remaining very fine over the British Islands.

Temperature risen decidedly over Germany and western Russia. Morning readings exceeding 60° on the Algerian coast and in the north of Spain, exceeding 50° at Scilly and Valencia, much lower to the northward and eastward. Lowest of all, (1) 14° at Kharkov, 17° at Moscow, 23° at Keiv, 29° at Prague; (2) 19° at Uleaborg, 22° at Archangel, 28° at Kuopio; (3) 33° at Nairn and York, 34° at Loughborough. Rising during the day to 60° or more at several of our inland and western stations, to 67° at Paris, 73° at Rochefort, 75° at Biarritz, and 77° to 79° on the Algerian coast. Not touching 60° over the greater part of Italy.

Barometer and Wind. 8 a.m. and 6 p.m.

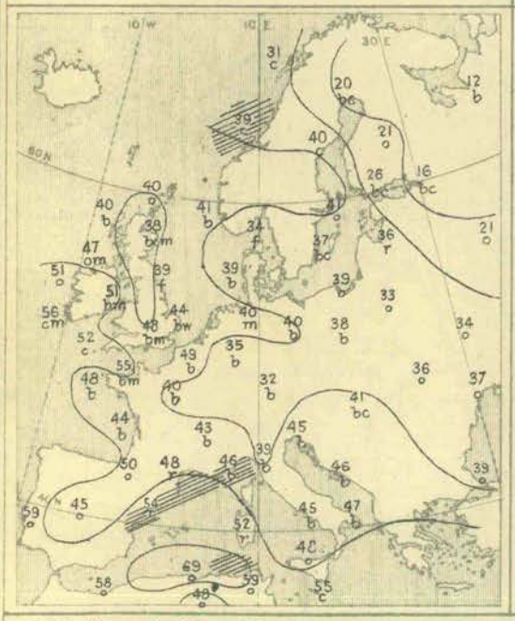


Wind (1) South-Easterly over Spain and the Bay of Biscay, Easterly over the Channel, England, and Ireland: light and anticyclonic over the North Sea and central Europe; (3) Westerly and North-Westerly over Scandinavia, the Baltic, and eastern Germany, and South-Westerly, very light, at Moscow. Very little change later.

Barometer highest, 30·3 ins. and more to 30·2 ins. in a large anticyclone stretching from the Farö Islands, over the North Sea and adjacent countries, Germany, Austria, and Switzerland to Italy and the Adriatic. Lowest, 29·6 ins. and less in a large but not deep depression off the Portuguese coast; (2) 29·5 ins. and less in another over the White Sea, and below 29·6 ins. in a "V" extending thence to the neighbourhood of St. Petersburg. Falling somewhat over western Europe later, and anticyclone decreasing in intensity.

Wednesday, 29th March.

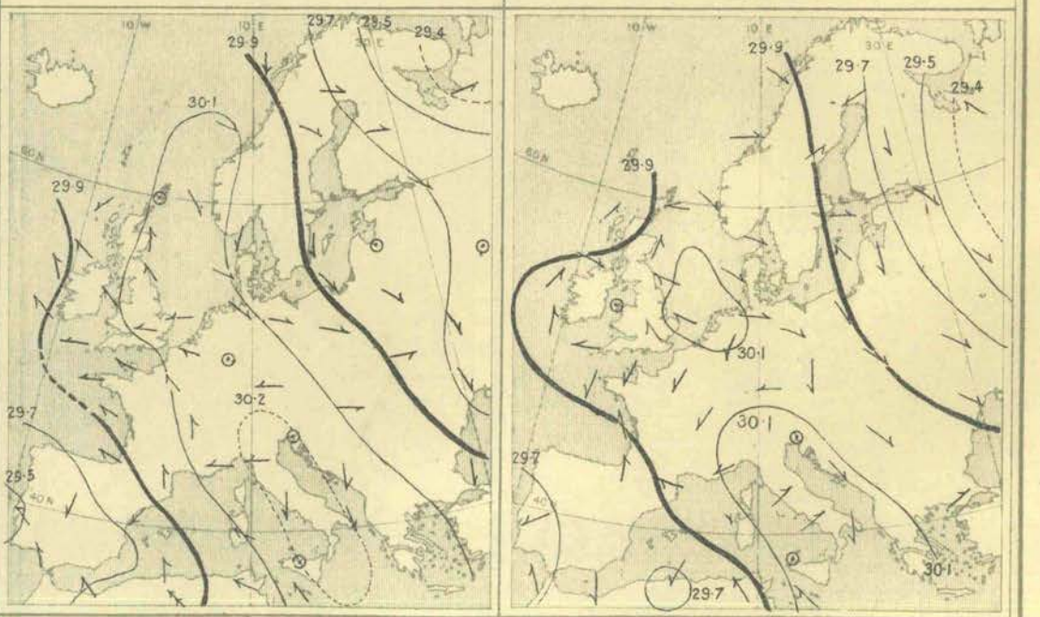
Temperature and Weather. 8 a.m.



Weather in morning fine and bright over Italy, south-western and central Europe as well as the North Sea and Great Britain, fair over northern Europe also; overcast over central and southern Russia, as well as over the Iberian Peninsula and Algeria, rainy in many parts of Spain. Heavy rain at San Fernando, Perpignan, and Cape Bearn during day, and slight showers at our extreme northern stations; weather fine elsewhere, but lunar halos seen in many parts of the United Kingdom.

Temperature risen in most places, fallen over northern Europe. Morning readings 69° at Algiers, 62° at Oran, 50° and more on the Spanish coasts, and in the south-west and west of our Islands; below 50° elsewhere (even over Italy) and the lowest of all 12° to 26° over the greater part of Russia, 33° to 39° over the greater part of central Europe, and the eastern and central parts of Great Britain, 39° at Florence, 40° at Paris. Rising later to between 65° and 70° over our inland counties, to 75° at Algiers, to between 60° and 65° over Ireland and the greater part of France, and 72° at Rochefort, not reaching 60° over Italy. Night cold over Great Britain and France.

Barometer and Wind. 8 a.m. and 6 p.m.



Wind very light and anticyclonic over the eastern half of the Mediterranean, south-eastern and central Europe, the North Sea and countries adjacent thereto; Easterly and South-Easterly on the Atlantic coasts of Europe and the United Kingdom, but Northerly and North-Westerly over all countries lying to the eastward of the North Sea—force moderate or light everywhere. Shifting to the South-Westward over the northern part of the British Islands later.

Barometer highest 30·2 ins. and more over Italy and Sicily, and exceeding 30·0 ins. over nearly the whole of south-eastern, central, and north-western Europe. Lowest (1) 29·4 ins. and less in a shallow depression having its centre over the White Sea, and below 29·7 ins. over the southern half of Russia; (2) 29·6 ins. to 29·5 ins. and less in another system over the western part of Spain, and the adjacent portions of the Atlantic. Falling rather decidedly in most places later, but inclined to rise over the Spanish Peninsula.

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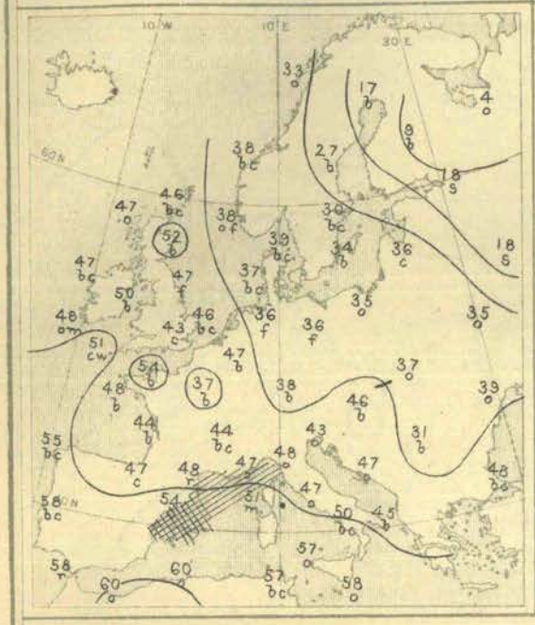
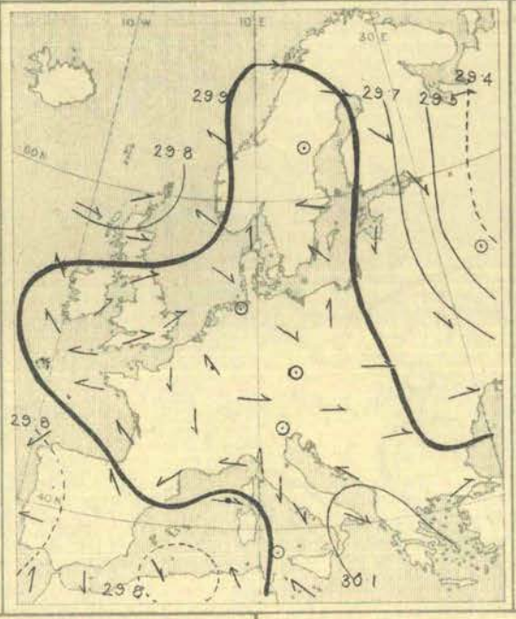
Thursday, 30th March.

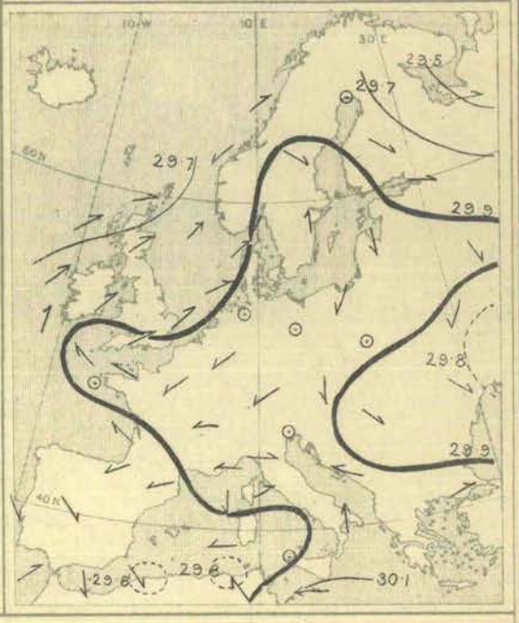
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning very fine over Scandinavia, Denmark, the North Sea, England, and central Europe: dull elsewhere, with rain in the southern parts both of Spain and of France; snow at St. Petersburg and Moscow. Much rain in the south-west of France, and at Nemours later, and slight showers at some of our western and northern stations: slight snow at some Russian stations.

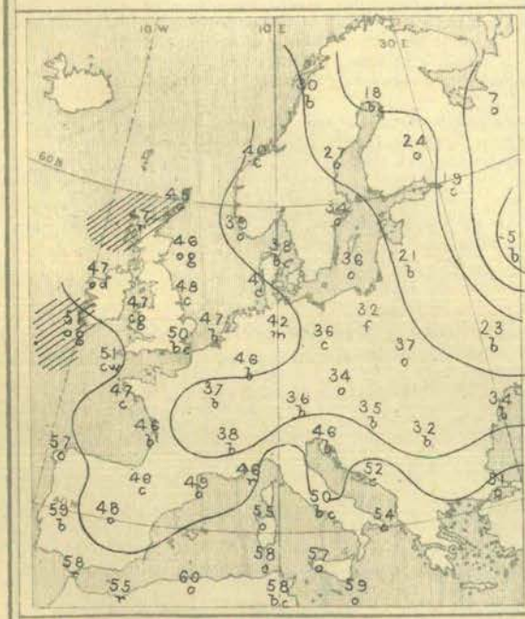
Temperature risen in north of our Islands, fallen over northern Russia. Morning readings exceeding 50° on Algerian and Spanish coasts, and at Aberdeen; lower elsewhere, but above 40° over the British Isles and north and west of France. Lowest, 4° Fahr. at Archangel, 9° at Kuopio, 17° at Haparanda, and below 30° in nearly all parts of Russia; below 40° over Germany. Rising later to between 60° and 69° over Great Britain and Italy, and to 70° and more over the south-west of France and in Algeria.

Wind light and anticyclonic almost everywhere, but fresh North-Easterly over southern Europe; Easterly and South-Easterly in the west; Westerly over Scotland and extreme northern Europe (South-Easterly in west of Norway); North-Westerly to Northerly over Finland and Russia. No decided or general change later.

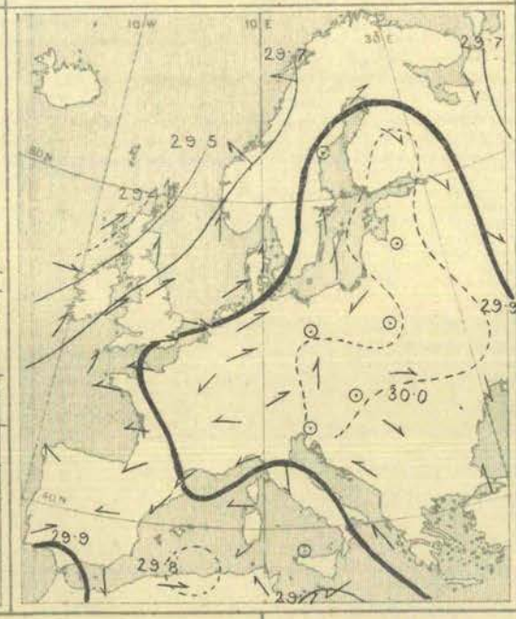
Barometer highest, 30·0 ins. and more to 29·8 ins. in a large anticyclone covering central and western Europe, the central area being over France and Germany. Lowest, 29·4 ins. and less over the north-east of Russia; 29·8 ins. and less over Algeria and Tunis, and also over the Shetlands and north of Scotland. Falling over the United Kingdom and western Europe later. Rising over Russia—rapidly at the central stations.

Friday, 31st March.

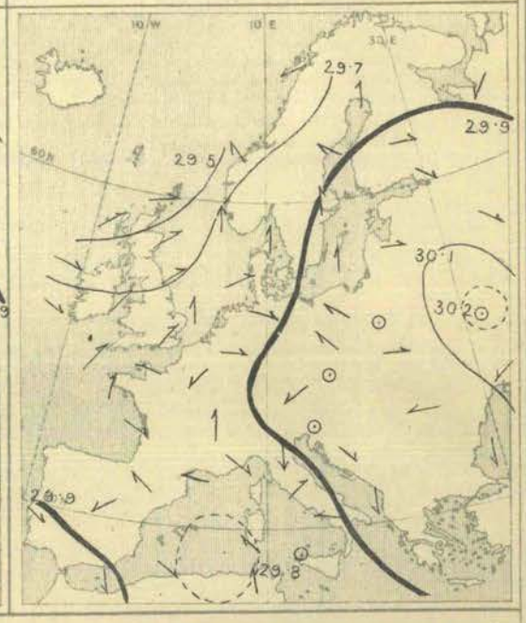
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over Russia, south-eastern and the greater part of western Europe, including England; cloudy or overcast in the north and extreme north-west, as well as at most of the Mediterranean stations. Rain falling over Algeria and the south of Spain, as well as at Stornoway, snow in the south of Russia. Showers later at the Scotch, Irish, and Welsh stations, and much *cirrus* cloud seen over England; halo at Oxford. Rain over Algeria and at Constantinople.

Temperature fallen rapidly over eastern and slightly over central Europe, risen over England and southern Europe. Morning readings, 60° or more at Sfax and Algiers, and exceeding 50° over southern Europe generally, as well as in the south-west of Ireland; exceeding 40° all over the United Kingdom and Channel, much lower in far east. Lowest, − 5° F. at Moscow, + 7° at Archangel, 18° both at Haparanda and Kharkov, 19° at St. Petersburg and Helsingfors, 21° at Riga. Rising later to between 60° and 70° over England, France, and Italy, and to between 75° and 77° over Algeria; not much above 50° over Ireland.

Wind light and anticyclonic over nearly the whole of Europe: moderate Northerly to Easterly on the northern shores of the Mediterranean, Easterly over the Bay of Biscay, Southerly over our Islands (strong in the north-west); Southerly, light, over the North Sea and Scandinavia, North-Westerly in the north of Russia. Falling light on our north-west coast later, and shifting to North-West in the south of Ireland, but remaining light from the Southward over England.

Barometer highest, 30·0 ins. to 29·8 ins. over the whole of Continental Europe and the southern counties of England. Lowest, 29·4 ins. and less off the extreme north-west of Scotland, and 29·7 ins. and less in a depression lying to the southward of Malta. Rising over our Islands later, falling slightly over France, depression near Malta apparently filling up and new anticyclone advancing towards the south-west of Ireland from the Atlantic.

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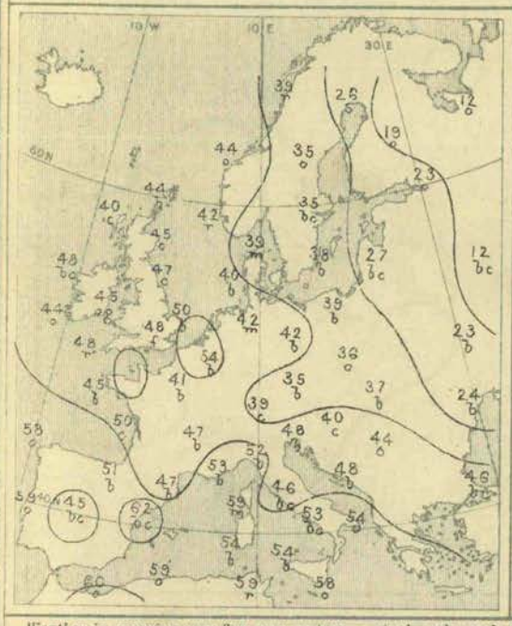
Saturday, 1st April.

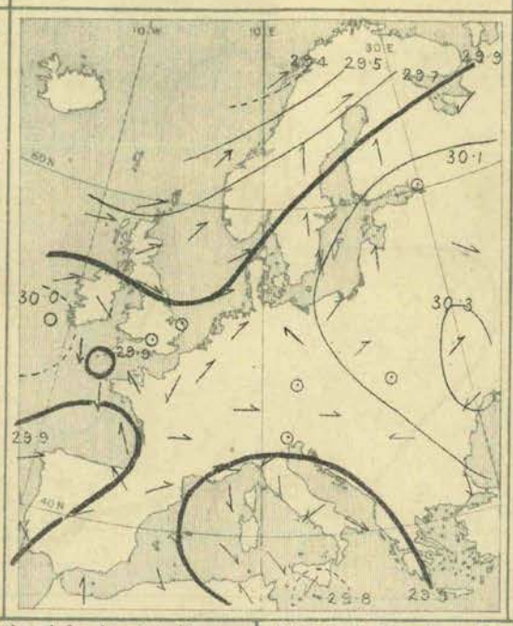
Temperature and Weather.

8 a.m.

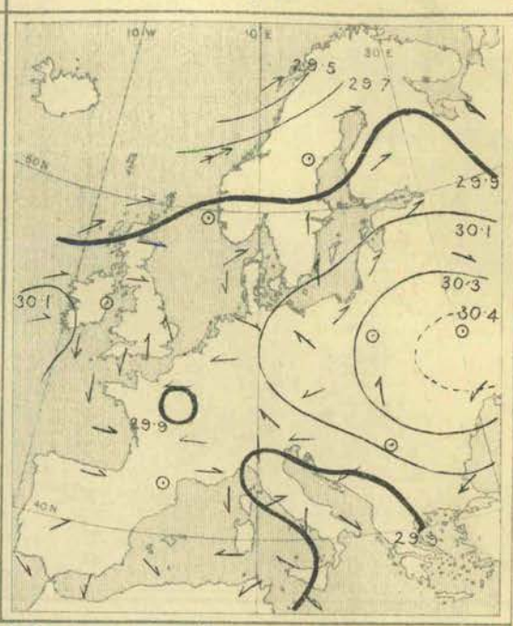


Barometer and Wind.

8 a.m.



8 p.m.



Weather in morning very fine over eastern, central, and nearly the whole of western Europe, dull over Portugal, dull and unsettled over northern Europe, with rain in several parts of Norway; snow at Haparanda. Some rain at several of the northern and extreme western stations later, but slight in our Islands, and very local.

Temperature fallen over the United Kingdom, risen quickly over Russia. Morning readings highest, 50° and more on the coasts of southern Europe as a whole, and over the south-eastern counties of England, but much lower over central, eastern, and northern Europe. Lowest, 12° Fahr. at Archangel and Moscow, 19° at Kuopio, 20° at Kharkov, and below 30° over Russia generally. Rising later to between 65° and 71° over our southern, midland, and eastern counties, as well as in France, Spain, and Italy, and touching 75° at some of the southern French stations: much less higher over Scotland and Ireland. Succeeding night less cold over the United Kingdom than of late.

Wind North-Easterly to North-Westerly over the Mediterranean. Light Southerly over northern Europe and the Baltic: very variable and light elsewhere, but shifting to Northward on our own western and south-western coasts. Little change later, but the Northerly breeze becoming strong at Scilly. South-Westerly gale setting in again at Christiansund in evening.

Barometer highest, 30·3 ins. and more to 30·1 ins. in an anticyclone over Russia and central Europe, and exceeding 30·0 ins. in another over the Atlantic to south-westward of Ireland. Lowest, 29·5 ins. to 29·4 ins. and less of the north-west of Norway, 23·8 ins. and less near Malta. Rising over the United Kingdom later, as the new anticyclone in the south-west spread eastwards. No important change occurring elsewhere.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are show by arrows, which are drawn flying *with the wind*, the force is indicated thus: ⟫⟶ = a heavy gale: ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breese: and ⓒ = a calm. In the left-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Germany, Sweden, and Norway, and 7 a.m. in France, Algeria, Italy, Austria, and Russia; that for 6 p.m. is prepared from observations made at 6 p.m. in the British Islands and France, 7 p.m. in Algeria, 8 p.m. in Sweden and Norway, Germany, and Austria, and 9 p.m. in Russia, Belgium, and Italy. The time indicated in each case is the standard time for each country.

GENERAL NOTES.

During this week the weather has been exceptionally fide for the time of year over almost the whole of Europe, but especially over the British Islands and France. Temperature in these regions has been high during the day time, low during the night; rainfall has again been conspicuous by its absence, and the amount of Bright Sunshine, though less than that of last week, has been very large.

These conditions were brought about by the large anticyclone which at first covered the north-western countries, but subsequently moved south-eastward, reaching Italy by Wednesday; it then moving to central Europe by Friday, while a new system advanced to our coasts from the Atlantic.

Over south-western Europe the weather has been less fair, owing to the presence of a depression off the south-western coasts of the Peninsula, bringing a good deal of rain at times to the Spanish stations, as well as to the Azores.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 74.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	33·2	?	37	?	EASTBOURNE	71·5	?	81	?
OSWALDKIRK (Yorkshire)	41·3	?	46	?	TENBY	47·7*	?	54*	?
WORKSOP	38·7	+13·8	44	+15	NEWQUAY	53·2	?	60	?
THURCASTON (Leicestershire)	56·6	+33·7	64	+39	TORQUAY	73·6*	?	84*	?
MARGATE	67·6	?	77	?	ARLEY COTTAGE (County Cavan)	25·8	?	29	?
WESTBOURNE (Sussex)	75·7*	?	86*	?	GUERNSEY	75·1*	?	85*	?
BRIGHTON	65·0	?	74	?					

* The values at Westbourne, Tenby, Torquay and Guernsey are obtained by Jordan's Photographic Recorder.

ERRATUM.—In the Report for last week the Bright Sunshine Values at Tenby should read "66·1," and "78," instead of "34·1" and "42."

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WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; R. H. SCOTT, F.R.S., SECRETARY.

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VOL. X. NO. 14.] *Third Series.* WEEK ENDING SATURDAY, 8TH APRIL, 1893. [*Price 6d.* *Annual Subscription post paid, £1 10s. 0d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871-90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the twenty-five years 1866-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the ten years 1881-90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

DISTRICTS. (See p. 80.)	Observed during the Week.					Above or below the Mean for the Week.	Accumulated.							
							For the Week.				From January 1st, 1893.			
	Highest.	Lowest.	Averages of Daily Maxima.	Averages of Daily Minima.	Averages of Daily Mean.		Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
	°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.														
0. SCOTLAND, NORTH	66	28	55·3	38·6	46·6	5 above.	46	+31	10	−16	199	+ 87	447	−12
1. SCOTLAND, EAST	69	25	56·8	36·7	46·3	5 above.	52	+29	15	−13	244	+ 76	505	+ 3
2. ENGLAND, N.E.	65	32	53·6	36·9	44·9	2 above.	42	+21	14	−12	270*	+111	405*	−44
3. ENGLAND, EAST	70	27	55·5	36·4	45·5	2 above.	48	+18	16	−10	341	+142	493	−15
4. MIDLAND COUNTIES	69	25	61·0	34·8	47·3	4 above.	67	+37	20	− 7	394	+174	471	−24
5. ENGLAND, SOUTH	69	31	59·8	41·1	50·0	5 above.	60	+29	3	−16	362	+120	356	−30
Principal Grazing, &c., Districts.														
6. SCOTLAND, WEST	68	27	58·1	38·1	47·7	5 above.	56	+34	11	− 8	273	+105	338	−36
7. ENGLAND, N.W.	69	30	58·8	38·8	48·3	5 above.	58	+35	9	−11	305	+134	308	−71
8. ENGLAND, S.W.	73	30	61·2	43·1	51·8	7 above.	69	+42	0	−14	397	+138	234	−59
9. IRELAND, NORTH	67	30	57·9	39·5	48·2	4 above.	54	+26	7†	− 9	318	+ 86	249	−80
10. IRELAND, SOUTH	68	28	59·7	40·6	49·7	4 above.	60	+29	4	−10	413	+ 94	167	−88
—CHANNEL ISLANDS	69	43	59·4	47·2	53·0	6 above.	77	+46	0	− 4	513	+191	70	−50

Rainfall. Bright Sunshine.

DISTRICTS. (See p. 80.)	Rainfall. For the Week.			Rainfall. From Jan. 1st, 1893.				Bright Sunshine. For the Week.				Bright Sunshine. From January 1st, 1893.			
	Number of Rainy Days.	Total Fall.	More or less than the mean for the Week.	No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.	Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
		10ths of in.	10ths of in.			Ins.	Ins.								
Principal Wheat-producing Districts.															
0. SCOTLAND, NORTH	2	5	1 less.	67	−2	13·6	− 0·9	40	+ 11	43	+11	216	− 3	23	0
1. SCOTLAND, EAST	1	1	4 less.	52	−1	6·0	− 2·1	42	+ 23	55	+23	298	+ 32	31	+ 3
2. ENGLAND, N.E.	0	—	4 less.	44	−5	4·6	− 1·4	56	+ 29	61	+31	322	+ 87	33	+ 9
3. ENGLAND, EAST	0	—	4 less.	49	+1	5·1	− 0·7	57	+ 22	62	+22	365	+ 84	37	+ 9
4. MIDLAND COUNTIES	0	—	4 less.	48	+1	4·9	− 1·9	61	+ 33	66	+35	356	+108	36	+ 11
5. ENGLAND, SOUTH	0	—	4 less.	48	+2	6·1	− 1·0	66	+ 37	72	+37	374	+116	37	+ 11
Principal Grazing, &c., Districts.															
6. SCOTLAND, WEST	0	—	7 less.	57	−1	9·8	− 4·9	55	+ 25	60	+26	297	+ 58	31	+ 6
7. ENGLAND, N.W.	0	—	5 less.	49	−4	6·4	− 2·1	64	+ 38	69	+41	301	+ 63	31	+ 6
8. ENGLAND, S.W.	0	—	6 less.	49	−5	8·8	− 2·2	68	+ 31	75	+33	398	+101	40	+ 10
9. IRELAND, NORTH	0	less than ½	5 less.	59	−3	7·9	− 1·5	49	+ 23	53	+24	264	+ 22	27	+ 2
10. IRELAND, SOUTH	1	1	6 less.	51	−5	8·8	− 2·3	61	+ 27	66	+28	305	+ 10	31	+ 1
—CHANNEL ISLANDS	0	—	5 less.	56	−3	7·4	− 1·7	72	+ 29	79	+32	441	+ 84	43	+ 8

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather was again almost continuously fine and bright during this period, the only exceptions being (1) at some of the Scotch stations, where rain fell on one or two occasions, and (2) on our east and south-east coasts, where some dense wet fogs caused a deposit of water in the rain gauge.

Temperature continued above the mean, the days being warm and the nights somewhat less cold than those for the weeks immediately preceding. The excess in England S.W. was as much as 7°, in the Channel Islands 6°, and over southern and north-western England 5°; in Ireland there was an excess of 4°, and in England E. and N.E. 2°. The highest of the maxima were recorded on rather irregular dates, and ranged from 73° in England S.W., and 70° in England E., to 65° in England N.E. The maximum readings on our east and south-east coasts were much lower than those inland, in many cases they were as low as 42° to 45°. The lowest of the minima were registered during the middle part of the week, when they ranged from 25° in Scotland E. and the Midland Counties, to 32° in England N.E., and to 43° in the Channel Islands.

Rainfall was again wanting over England and nearly so over Ireland and Scotland; in the northern parts of the latter country, however, some rather heavy falls occurred on the 6th.

Bright Sunshine continued very prevalent generally, the percentage of the possible duration ranging from 43 to 60 in Scotland, from 53 to 66 in Ireland, and from 61 to 75 in England; in the Channel Islands the percentage was as high as 79.

Barometer and Wind.—The distribution of pressure was almost entirely anticyclonic, and no depressions appeared over any part of our Islands. Westerly winds prevailed for a time in the north and north-west, but with this exception, the winds over our Islands were from the North-Eastward or Eastward. In force they were mostly moderate or light, but blew freshly at times on our south and south-east coasts.

* This value has been altered owing to the receipt of further information.

† The corresponding value for the week ending March 11th should read "1" instead of "0."

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II.—DATA from which the SUMMARY on page 79 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°				Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	52	39	49·7	41·1	45·2	+ 5·4	26	3	2	0·31	−0·21	*	*	*	*
	Stornoway	59	31	52·6	37·9	44·9	+ 3·3	38	11	4	0·12	−0·56	41·2	+11·0	44	+11
	Wick	57	33	53·7	38·6	45·8	+ 4·3	41	10	1	0·03	−0·35	*	*	*	*
	Lairg Ⓢ	64	28	58·4	34·7	46·2	+ 4·6	60	20	3	0·90	+0	*	*	*	*
	Glencarron Ⓢ	66	35	58·4	39·3	48·4	+ 7·4	56	8	3	0·87	−0·25	*	*	*	*
	Fort Augustus Ⓢ	66	30	56·9	38·6	47·3	+ 5·5	51	10	2	0·67	+0·19	29·7	?	32	?
	Fort William Ⓢ	61	36	57·7	40·1	48·5	+ 5·4	53	5	2	0·80	−0·14	49·3	?	53	?
1. SCOTLAND, E.	Nairn	61	29	56·7	37·3	46·5	+ 4·4	51	13	2	0·33	+0·01	*	*	*	*
	Aberdeen	62	36	53·7	39·4	46·2	+ 4·4	40	7	2	0·04	−0·48	52·8	+22·3	57	+23
	Braemar Ⓢ	60	25	56·8	33·8	44·8	+ 6·1	54	23	0	—	−0·55	55·2†	?†	59†	?†
	Ochtertyre Ⓢ	69	27	62·4	34·7	48·1	+ 6·2	73	20	0	—	−0·56	*	*	*	*
	Leith	60	34	54·1	38·4	45·9	+ 2·6	42	10	0	—	−0.37	*	*	*	*
	Marchmont Ⓢ	66	31	57·3	36·4	46·4	+ 5·2	54	16	1	0·02	−0·55	51·3	?	55	?
2. ENGLAND, N.E.	Alnwick Castle	—	—	—	—	—	—	—	—	0	—	−0·52	*	*	*	*
	Durham	64	33	57·1	35·1	45·6	+ 3·4	54	19	0	0·01‡	−0·51	51·0	+24·9	55	+28
	Shields	63	36	51·9	37·7	44·5	+ 2·2	36	12	0	—	−0·43	*	*	*	*
	Scarborough Ⓜ	63	32	51·5	37·3	44·1	+ 1·2	34	13	0	—	−0·48	*	*	*	*
	York	65	33	60·3	35·1	47·1	+ 3·4	65	19	0	—	−0·40	59·1	+31·9	64	+35
	Spurn Head	57	37	47·4	39·4	43·2	+ 0·6	19	7	0	—	−0·32	*	*	*	*
3. ENGLAND, E.	Hillington Ⓜ	62	29	55·3	35·5	44·9	+ 1·2	48	18	0	0·01‡	−0·39	53·3	+23·5	58	+26
	Yarmouth	50	38	46·6	39·3	42·8	+ 0·2	17	8	0	0·02‡	−0·38	*	*	*	*
	Geldeston	57	27	51·8	35·6	43·3	+ 0·4	36	18	0	—	−0·33	43·0	+ 8·1	47	+ 9
	Cambridge	70	29	64·6	35·0	49·1	+ 4·7	79	20	0	—	−0·37	64·1	+30·9	70	+35
	Rothamsted	62	30	59·2	36·4	47·3	+ 3·8	61	16	0	—	−0·43	65·9	?	72	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	69	26	61·1	31·9	45·8	+ 2·1	69	28	0	—	−0·36	*	*	*	*
	Loughborough	69	27	61·7	33·4	46·9	+ 2·3	70	24	0	—	−0·40	*	*	*	*
	Stamford (Ketton Hall)	68	25	61·3	33·4	46·7	+ 2·5	69	24	0	—	−0·45	*	*	*	*
	Cheadle Ⓜ	65	33	59·0	37·1	47·5	+ 5·1	59	14	0	—	−0·49	*	*	*	*
	Churchstoke Ⓜ	67	29	60·0	32·9	45·8	+ 3·3	65	25	0	—	−0·42	62·3	+32·6	68	+36
	Hereford Ⓜ	68	30	61·0	35·7	47·7	+ 3·2	66	18	0	—	−0·40	*	*	*	*
	Cirencester	67	35	61·6	37·1	48·8	+ 5·9	68	14	0	—	−0·49	59·9	+29·9	66	+33
	Oxford	67	34	62·4	37·1	49·1	+ 4·5	70	14	0	—	−0·40	62·1	+31·3	68	+34
5. ENGLAND, S.	London	68	38	61·6	40·7	50·7	+ 5·2	66	4	0	—	−0·40	52·3†	+26·3†	57†	+29†
	North Foreland	50	40	47·6	42·1	44·7	+ 0·9	19	0	0	—	?	*	*	*	*
	Strathfield Turgiss Ⓜ	68	31	63·9	36·9	49·8	+ 5·1	76	14	0	—	−0·41	*	*	*	*
	Dungeness	59	37	53·9	42·4	47·9	+ 4·1	41	0	0	—	−0·42	*	*	*	*
	Hastings (St. Leonards)	66	40	60·6	41·9	50·8	+ 5·2	62	0	0	—	−0·48	74·9	+38·2	82	+42
	Southampton	69	40	66·5	41·5	53·4	+ 7·7	82	1	0	—	−0·48	72·8	+37·0	80	+41
	Hurst Castle	65	41	60·7	43·1	51·5	+ 6·7	67	0	0	—	−0·40	*	*	*	*
	Stowell Ⓜ	69	38	63·6	40·4	51·5	+ 7·3	73	4	0	—	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	63	36	58·7	40·1	49·0	+ 5·4	57	5	1	0·05	−1·05	*	*	*	*
	Glasgow	65	33	57·6	39·0	47·9	+ 5·2	54	8	0	—	−0·55	39·1	+13·9	42	+14
	Ardrossan	64	36	56·1	40·4	47·9	+ 4·3	48	4	0	—	−0·52	*	*	*	*
	Glenlee Ⓢ	68	27	61·0	33·0	46·3	+ 4·8	68	25	0	—	−0·75	*	*	*	*
	Douglas (Isle of Man)	60	32	57·0	38·2	47·2	+ 3·8	52	11	0	—	−0·59	71·2	+35·1	77	+38
7. ENGLAND, N.W.	Newton Reigny	67	30	60·7	33·5	46·5	+ 4·6	67	24	0	—	−0·45	77·1	+47·3	84	+52
	Stonyhurst	63	33	57·0	36·7	46·4	+ 3·4	53	15	0	—	−0·61	65·3	+37·5	71	+41
	Blackpool Ⓜ	63	33	58·6	38·0	47·8	+ 4·3	57	11	0	—	−0·45	65·7	+36·7	71	+40
	Manchester	66	33	60·2	37·8	48·5	+ 5·1	63	12	0	—	−0·50	53·5†	?	58†	?
	Liverpool Obsy. (Bidston)	66	37	58·3	39·4	48·4	+ 3·8	56	7	0	—	−0·38	*	*	*	*
	Llandudno Ⓜ	69	38	60·3	42·8	51·1	+ 5·8	64	0	0	—	−0·43	57·6	+30·6	63	+34
	Holyhead	69	39	56·6	43·1	49·5	+ 4·5	53	0	0	—	−0·47	*	*	*	*
8. ENGLAND, S.W.	Llandovery	73	30	65·4	36·7	50·6	+ 6·8	82	15	0	—	−0·70	*	*	*	*
	Pembroke	63	41	57·0	44·7	50·6	+ 5·9	60	0	0	—	−0·48	64·8	+26·9	71	+29
	Arlington (N. Devon)	69	38	64·0	43·0	53·1	+ 9·6	78	0	0	—	−0·67	*	*	*	*
	Cullompton Ⓜ	70	36	64·6	39·7	51·6	+ 7·0	77	6	0	—	−0·55	66·4	+34·2	73	+38
	Falmouth	60	41	57·0	46·3	51·4	+ 5·6	66	0	0	0·01‡	−0·71	67·2	+30·4	74	+34
	Plymouth	68	42	62·3	47·1	54·3	+ 7·8	86	0	0	—	−0·58	68·6	+32·4	75	+36
	Prawle Point	62	41	57·9	44·4	50·8	+ 6·4	62	0	0	—	−0·50	*	*	*	*
9. IRELAND, N.	Malin Head	63	43	53·1	44·7	48·6	+ 4·5	46	0	0	—	?	*	*	*	*
	Londonderry	67	36	61·0	40·3	50·2	+ 5·4	65	5	0	—	−0·53	*	*	*	*
	Edenfel (Omagh)	66	31	59·7	35·6	47·1	+ 3·9	63	18	0	—	−0·51	*	*	*	*
	Mullaghmore												*	*	*	*
	Belmullet	67	42	57·0	44·4	50·4	+ 3·6	59	0	1	0·02	?	*	*	*	*
	Markree Castle	66	30	58·4	36·4	46·9	+ 3·0	58	16	2	0·15	−0·40	46·0	+15·5	50	+17
	Brookeborough	65	31	60·3	34·7	46·9	+ 4·1	65	20	0	—	−0·60	*	*	*	*
	Armagh	63	31	59·3	35·8	47·0	+ 4·1	61	17	0	—	−0·49	56·4	+29·2	61	+31
	Donaghadee	59	42	54·0	43·9	48·7	+ 4·7	47	0	0	—	−0·45	*	*	*	*
	Edgeworthstown												*	*	*	*
10. IRELAND, S.	Dublin	61	37	56·3	41·4	48·5	+ 3·3	48	2	0	—	−0·48	63·3	+29·4	69	+32
	Parsonstown	67	31	60·4	37·1	48·2	+ 3·7	64	14	0	—	−0·50	53·2	+20·0	58	+21
	Kilkenny	66	28	61·4	37·4	48·8	+ 4·0	67	13	0	—	−0·51	*	*	*	*
	Waterford	66	32	61·3	37·9	49·0	+ 3·3	66	11	0	—	−0·63	*	*	*	*
	Roche's Point	60	37	57·3	43·9	50·3	+ 4·0	58	0	0	—	−0·75	*	*	*	*
	Valencia	68	34	61·6	42·9	51·8	+ 5·0	69	0	0	—	−0·86	65·0	+28·1	71	+31
	Killarney	65	31	60·6	41·2	50·4	+ 4·4	62	2	2	0·25	?	*	*	*	*
	Foynes	66	36	58·3	43·1	50·3	+ 5·0	58	0	1	0·22	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	60	43	56·0	46·1	50·8	+ 3·8	62	0	0	—	−0·53	*	*	*	*
	Jersey	69	46	62·7	48·3	55·2	+ 8·1	92	0	0	—	−0·49	69·9	+28·9	77	+32

Stations marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

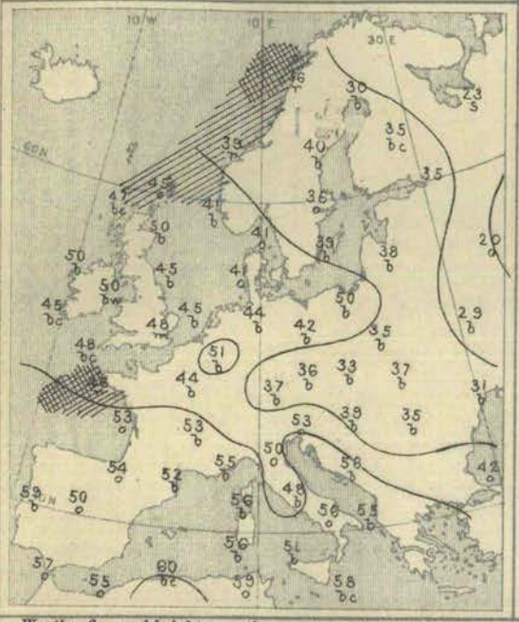
† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

‡ Wet Fog or dew.

Sunday, 2nd April.

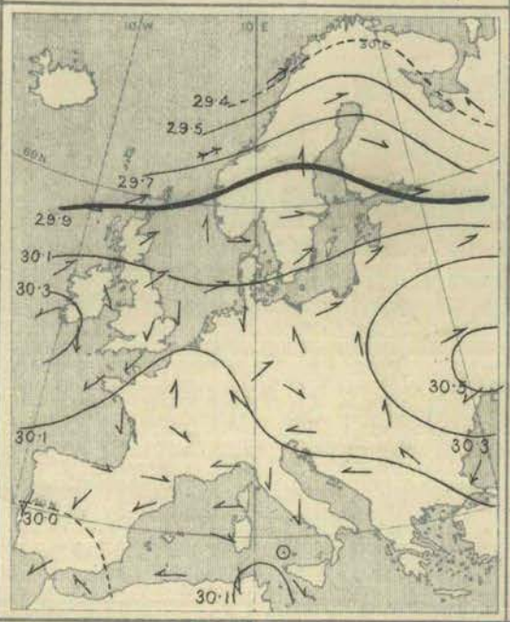
Temperature and Weather.

8 a.m.

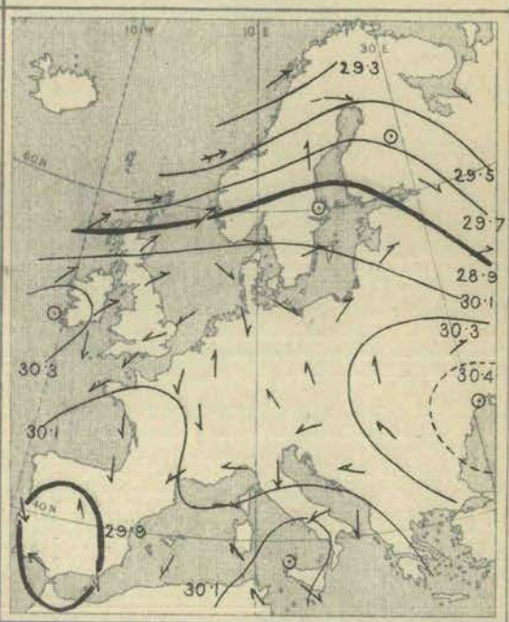


Barometer and Wind.

8 a.m.



6 p.m.



Weather fine and bright over the greater part of our Islands and the Continent, but dull in the extreme north of Scotland, and rainy in the west of Norway. Snow falling at Archangel. A little rain falling later in the north of Scotland, and a considerable quantity (1·2 ins.) at Christiansund. Slight rain falling also at one or two of the Spanish stations, but weather remaining fine and dry in all other parts of Europe.

Temperature fallen in many parts of England and Ireland, as well as in Austria, but risen in most other countries. Morning readings highest, 65° at Oporto, 62° at Barcelona, 60° at Algiers, 59° at La Calle, and 58° at Malta; above 55° at most of the Mediterranean and Spanish coast stations. Lowest, 20° at Uleaborg and Moscow, 21° at Kharkov, 23° at Archangel, and 27° at Nicolaieff; below the freezing point over the greater part of Russia. Daily maxima over England lower than of late; thermometer not exceeding 63° in London. Rising a little above 70° in many parts of France and Spain, and just touching that point at some of the Italian stations.

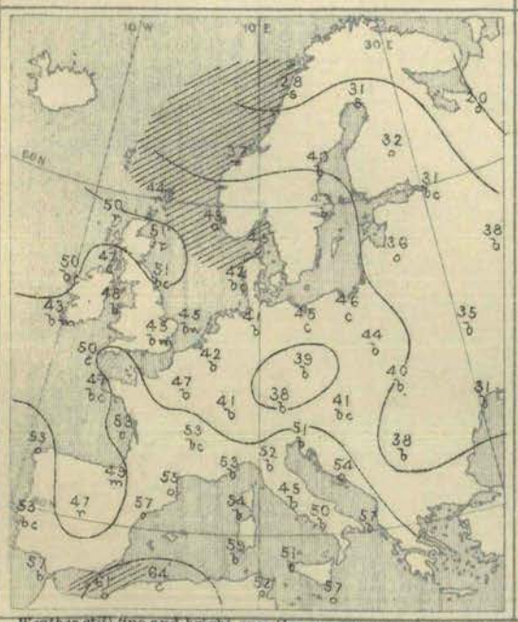
Wind Westerly or South-Westerly over the northern parts of the United Kingdom and northern Europe generally, light or moderate in force in most places, but strong to a gale in the west of Norway. Northerly or North-Easterly over the south of our Islands, the west and north of France, and the greater part of Spain and Italy. Variable or South-Easterly in Italy and Austria. Subsequently increasing to a moderate gale from the South-Westward or Westward in the extreme north of Scotland; no important change occurring elsewhere.

Barometer highest, 30·4 ins. to 30·5 ins. over the south of Russia; 30·3 ins. and upwards in the south of Ireland; 30·0 ins. and upwards in an anticyclone covering all but the most northern parts of our Islands and the Continent. Lowest, 29·4 ins. and less in two depressions—one passing eastwards across the White Sea, the other approaching the north-west of Norway; gradients rather steep over the norther parts of Russia and Scandinavia. Secondary disturbance appearing later off the north of Scotland, and gradients becoming rather steep over our extreme northern coasts.

Monday, 3rd April.

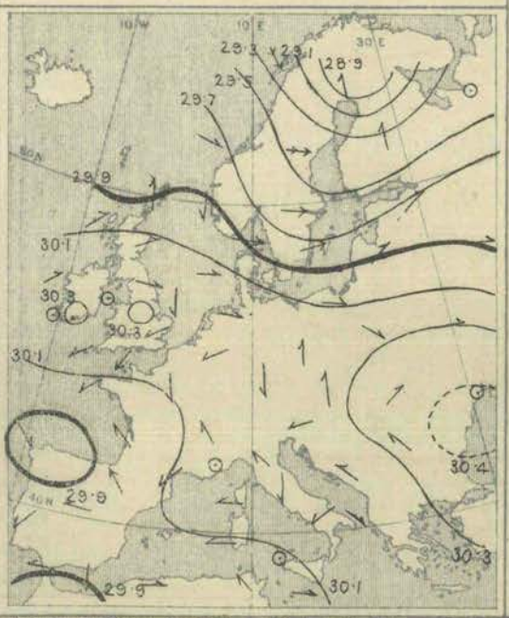
Temperature and Weather.

8 a.m.

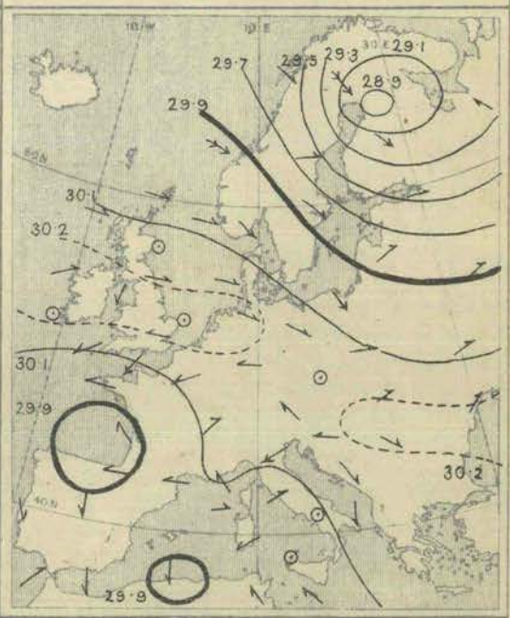


Barometer and Wind.

8 a.m.



6 p.m.



Weather still fine and bright over the greater part of our Islands and the Continent, but dull and rainy in the north of Scotland, and also in the west of Norway; snow falling in the north of Scandinavia. Cloudy also in Spain, Algeria, and the west of France, with rain at Madrid. No important change occurring during day, but snow falling at Christiansund in evening, as well as in Finland.

Temperature changed rather irregularly; risen a little in most places, but fallen over central England, as well as in Germany, the Netherlands, Spain, and northern Italy. Morning readings highest, 64° at Algiers, 63° at Sfax, 62° at Bilbao, and 61° at Oran, above 55° at many of the Mediterranean stations, and above 50° in some parts of Scotland. Lowest, 20° at Archangel, 28° at Bodö and Helsingfors, and 31° at Haparanda, St. Petersburg, Nicolaieff, and Odessa, below 40° in many parts of central Europe and also over central England. Rising during day to between 65° and 67° over the inland parts of England, and to 70° or more in the west and south of France, the highest reading of all being 70° at Biarritz. Remaining below 70° in Italy.

Wind varying between South-West and North-West over northern Europe, and also in the north of our Islands; strong to a gale in force at many of the Scandinavian stations. Light to moderate from East or North-East over the south of our Islands, and also in Spain and Italy, but South-Easterly in the west of France. Light and variable over the central parts of the United Kingdom, and also in Germany and Austria. No important change occurring during day, but North-Westerly gale springing up in Lapland.

Barometer highest, 30·3 ins. to 30·4 ins. over Austria and the south of Russia, 30·2 ins. to 30·3 ins. in a long and broad band stretching thence across central Europe and the Netherlands to England and Ireland. Lowest, 28·9 ins. and less in a rather deep depression passing eastwards across Lapland; 29·9 ins. and less in a shallow system over the north-west of Spain. Both depressions moving eastwards later: barometer rising in Scandinavia, but falling over Ireland, England, and France.

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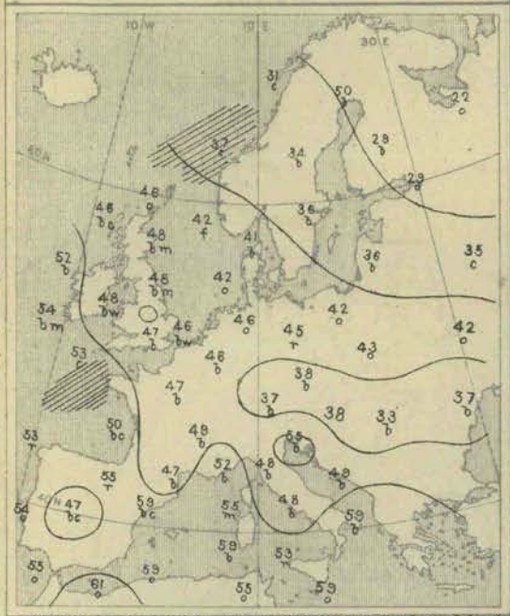
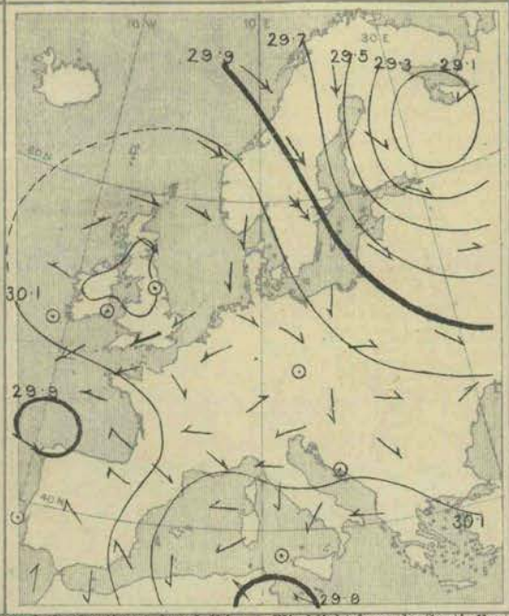
Tuesday, 4th April.

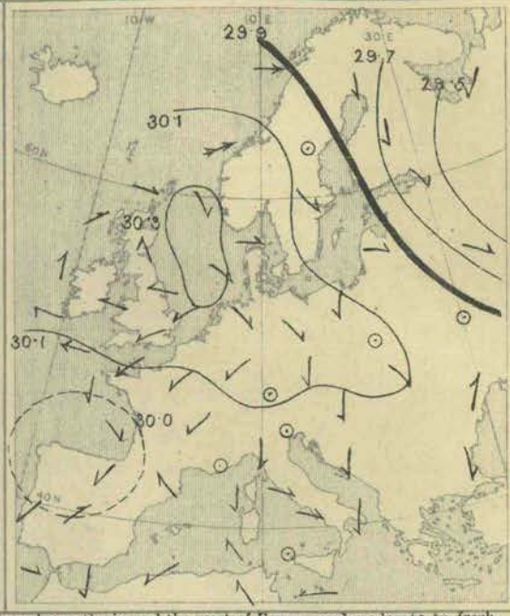
Temperature and Weather. — 8 a.m.



Barometer and Wind. — 8 a.m.



Barometer and Wind. — 6 p.m.



Weather fine and bright over the greater part of our Islands and the Continent, but dull in many parts of Denmark, Russia, and north Germany, with rain at Berlin and Swinemunde. Cloudy or overcast at several of the Spanish and Algerian stations, with rain at Corunna, and also at Biarritz. No important change occurring during day; weather remaining fine and dry in nearly all parts of western Europe; rain ceasing at Biarritz, but commencing at Christiansund in evening. Considerable quantities of rain falling in some parts of Algeria and Tunis.

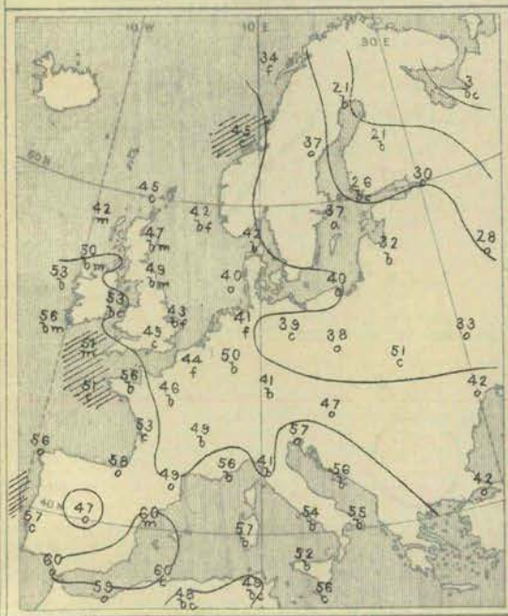
Temperature changed slightly and irregularly. Morning readings highest, 61° at Oran, 60° at Sfax, 59° at several of the Mediterranean and Spanish coast stations: 50° to 54° in the extreme west and south-west of our Islands. Lowest, 22° at Archangel, and 20° at Uleaborg, Kuopio, and St. Petersburg; below 40° in many parts of northern, eastern, and central Europe, as well as over central England. Rising during day to 60° or more in several parts of the United Kingdom, and reaching 67° at Parsonstown and Cambridge; exceeding 70° at several of the French stations, but remaining below that point in Spain and Italy.

Wind light from the South-Eastward over Spain and the west of France, and moderate to fresh from the North-Eastward over the southern parts of our Islands. Variable over the central parts of the United Kingdom; light from the Westward on our northern coasts. Strong to a gale from the North-Westward over Sweden and Finland; moderate from North over Denmark and north Germany, light from West over Poland and eastern Germany. Easterly or North-Easterly over Italy and the south of France. Shifting later to the Northward in the west of France; no important change occurring elsewhere, but wind moderating in Sweden and Finland.

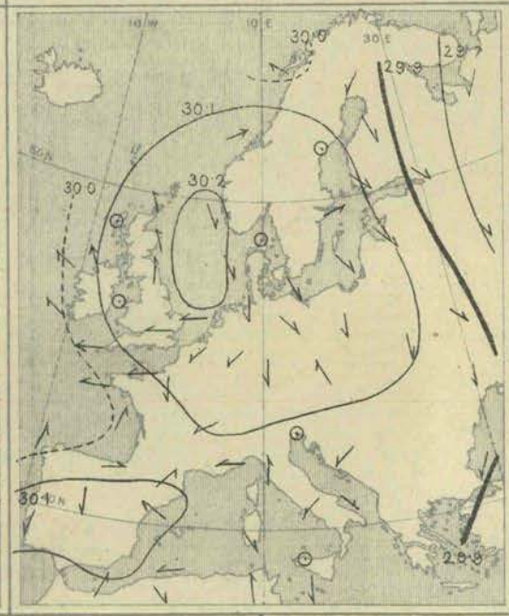
Barometer highest, 30·2 ins. to 30·3 ins. in an anticyclone covering our Islands and the North Sea, and extending south-eastwards in the form of a narrow band across the Netherlands, Germany, and Austria. Lowest, 29·0 ins. and less in a well-marked depression over northern Russia; 29·9 ins. and less in two shallow systems lying respectively over the southern part of the Bay of Biscay, and between Malta and the Tunisian coasts. Depression over the Bay of Biscay subsequently advancing over France; slight fall of barometer taking place in most parts of western Europe.

Wednesday, 5th April.

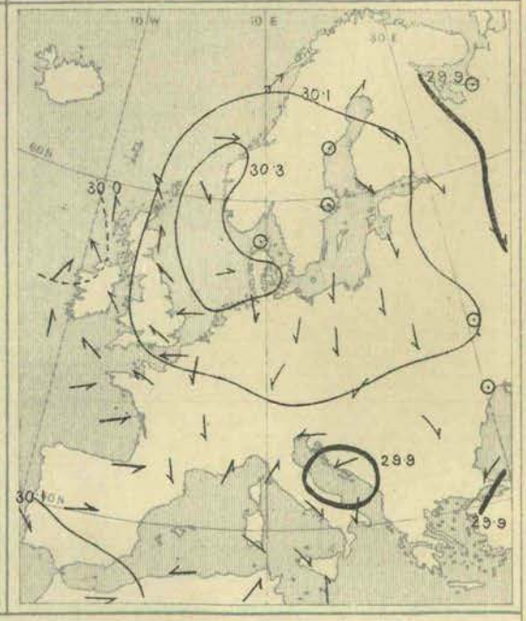
Temperature and Weather. — 8 a.m.



Barometer and Wind. — 8 a.m.



Barometer and Wind. — 6 p.m.



Wind still fine and bright over our Islands and a considerable portion of the Continent, but with fog in some parts of Great Britain, as well as over the Netherlands and north Germany. Dull at some of the German and Austrian stations, and also in Spain and Algeria. A little rain falling later at Stornoway and Brest, and a larger quantity at Bodö, but weather remaining fair and dry in nearly all other parts of Europe.

Temperature risen in Ireland and England, as well as in Spain and the south of France, but fallen in most other localities. Morning readings highest, 61° at Bilbao, and 60° at Barcelona, San Fernando, Oran, and Algiers; above 55° over the greater part of the Mediterranean, and above 50° at several of our own western and southern stations. Lowest, 8° at Archangel, 17° at Uleaborg, 21° at Kuopio, 26° at Hangö, and 28° at Moscow. Daily maxima over our Islands varying greatly in different places; thermometer exceeding 65° in many parts of Ireland and England, and reaching 70° at Cambridge, but not rising above 57° in London, and remaining below 50° on our east and south-east coasts. Exceeding 70° at some of the French and Italian stations, and reaching 75° at Limoges and 77° at Rochefort.

Wind light to moderate from the Eastward or South-Eastward over Ireland and England, and from the Southward in Scotland. Light from North or North-West in Denmark, Germany, Russia, and the south of Scandinavia. Variable in Spain, Algeria, the south of France, and northern Italy, Northerly or North-Westerly over the southern parts of Italy. No important change occurring during day, but South-Westerly gale setting in at Bodö in evening.

Barometer highest, 30·3 ins. and upwards over the North Sea; 30·0 ins. and upwards in an anticyclone covering all but the most eastern and south-eastern parts of Europe. Lowest, 29·7 ins. and less over central and northern Russia. Slight fall of barometer taking place in most parts of western Europe during day, but general distribution of pressure remaining unchanged.

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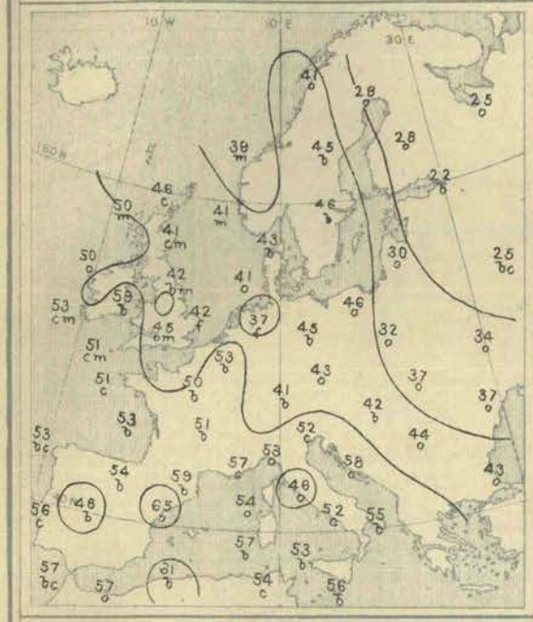
Thursday, 6th April.

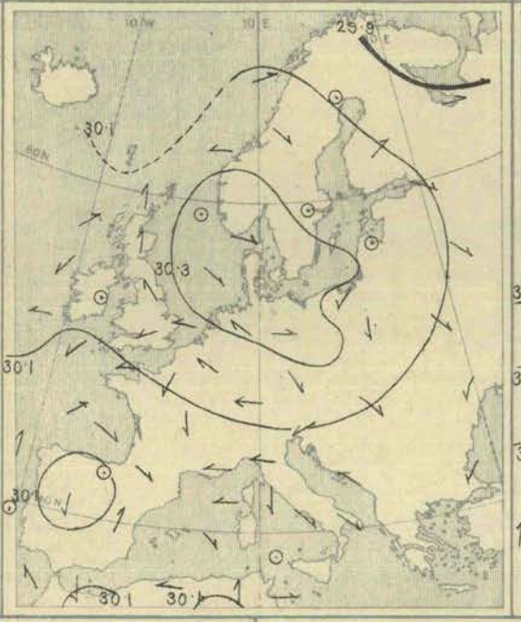
Temperature and Weather.

8 a.m.

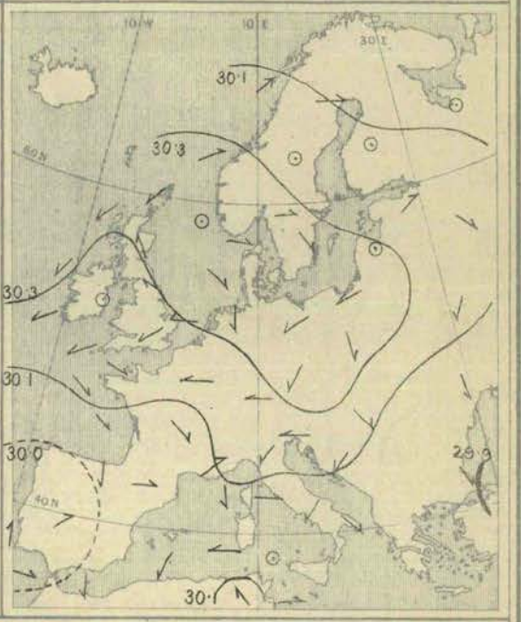


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning fair or fine over the greater part of our Islands and the Continent, but dull and foggy over central England, as well as in the north of Ireland. Dull also at most of the Russian stations, as well as over Italy. Rain falling later in the north of Scotland and also at Belmullet, and a thunderstorm with rain occurring at Perpignan; weather remaining fair and dry in all other parts of western Europe.

Temperature changed very irregularly. Morning readings highest, (1) 65° at Barcelona, 61° at Algiers, 60° at Bilbao, and 59° at Perpignan; (2) 59° at Holyhead, 56° at Jersey, and 53° at Valencia Island; a little above 50° at several of our own south-western, western, and northern stations, but below 40° over central England. Lowest, 22° at St. Petersburg, 25° at Archangel and Moscow, and 28° at Haparanda and Kuopio, below the freezing point in most parts of Russia. Rising later to 60° at Nairn, and to between 60° and 63° at many of the English stations, exceeding 70° in some parts of France and Spain.

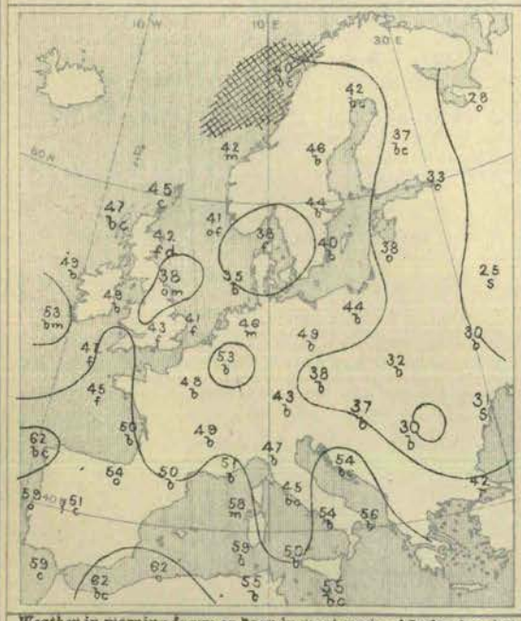
Wind light to moderate from the Eastward or North-Eastward over Ireland, England, the Netherlands, and western Germany, calm or Southerly in Scotland. Variable in Scandinavia, but South-Westerly in Finland, and North-Westerly or Northerly over Denmark, eastern Germany, Austria, and the central and southern parts of Russia and Italy. Variable over France, Spain, and Algeria. No important change occurring later, but light Northerly and North-Westerly breezes setting in along the west coast of France.

Barometer highest, 30·20 ins. to 30·35 ins. in a large anticyclone lying over Scandinavia, Denmark, Germany, the Netherlands, and the eastern parts of Great Britain, 30·2 ins. and upwards in a new system appearing to the westward of our Islands. Lowest, 29·9 ins. and less over the Kola Peninsula. The two anticyclones subsequently becoming united, and barometer rising in most parts of western Europe. Shallow depression appearing off Portuguese coast in evening; no change occurring elsewhere.

Friday, 7th April.

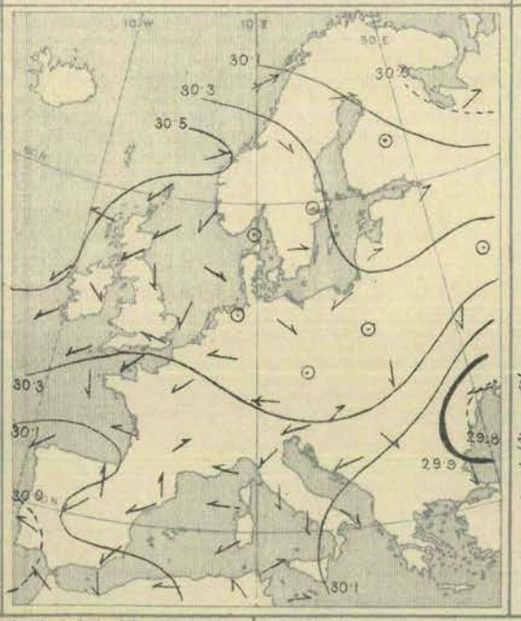
Temperature and Weather.

8 a.m.

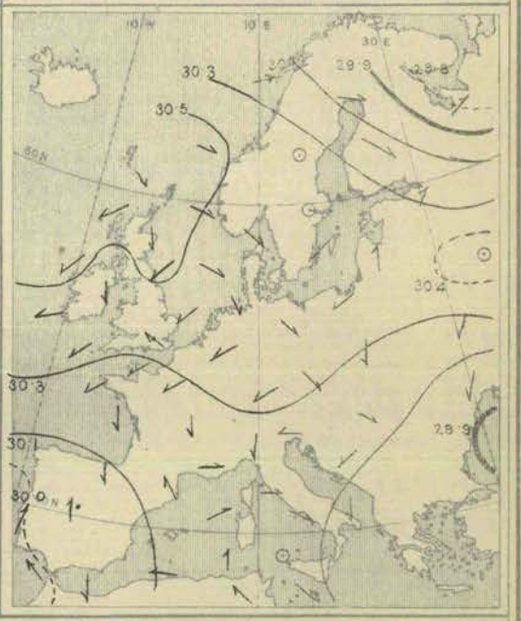


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning foggy or hazy in most parts of Ireland and England, and dull in Scotland, with rain at Nairn and Aberdeen. Fine and bright over Sweden, Denmark, and nearly the whole of central and southern Europe; foggy in the south of Norway, dull at most of the Russian stations, with snow at Moscow and Odessa. Sky clearing later in nearly all parts of the United Kingdom, and weather remaining dry over western Europe generally. Heavy rain (1·6 ins.) falling at Lisbon, and considerable quantities of snow on the northern shores of the Black Sea.

Temperature changed rather irregularly, but fallen in most countries. Morning readings highest, 62° at Corunna, Barcelona, Nemours, and Algiers; above 55° over the greater part of the Mediterranean, as well as on the coasts of Spain, and at one or two of the English Channel stations. Lowest, 25° at Moscow, 28° at Archangel, and 30° at Kiev, Kharkov, and Hermanstadt; below 40° over the English midland and northern counties. Rising during day to between 65° and 68° over the south of England, but remaining below 45° on the east coasts. Exceeding 70° at several of the French, Spanish, and Italian stations.

Wind light to moderate from the Eastward or North-Eastward over the greater part of our Islands, France, western Germany, and Spain. South-Westerly or Westerly in the north of Scandinavia, with a strong gale at Bodö, light and variable over Finland and the south of Scandinavia, Northerly or North-Westerly over Denmark, eastern Germany, and Austria. Varying between East and South in Algeria. No important change occurring during day.

Barometer highest, 30·5 ins. and upwards in a large area lying to the north-westward and northward of our Islands; 30·2 ins. and upwards in an anticyclone covering all but the extreme northern, south-eastern, and south-western parts of Europe. Lowest, 29·8 ins. and less in a depression over the Black Sea, 30·0 ins. and less in shallow systems lying respectively over the extreme north of Russia, and off the south-west of Spain. No important change occurring later; barometer rising slightly in most of the northern countries, but falling a little in the south of Europe.

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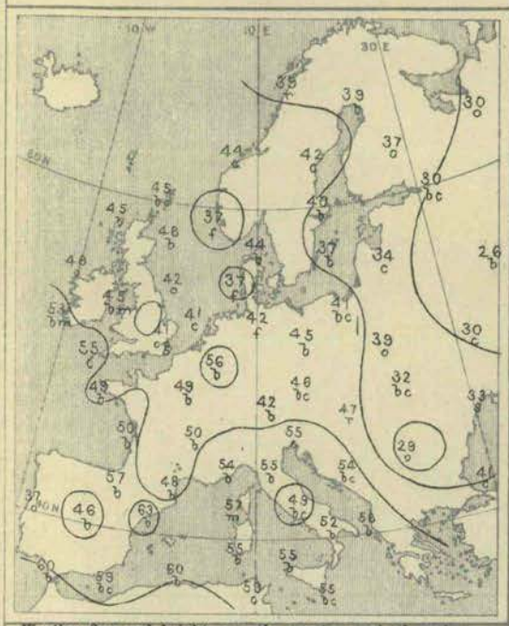
Saturday, 8th April.

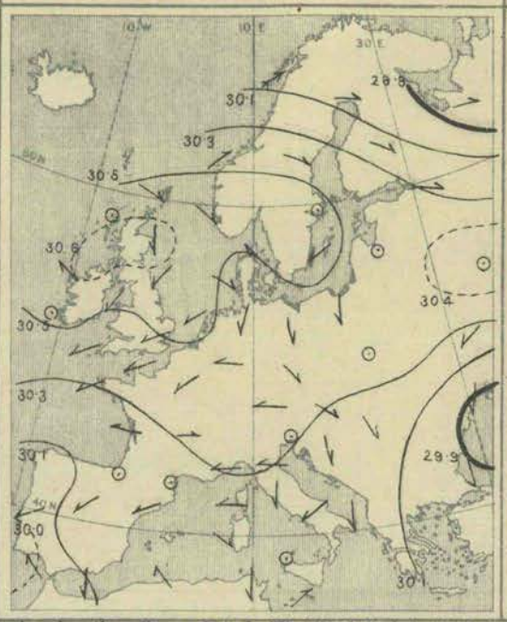
Temperature and Weather. 8 a.m.

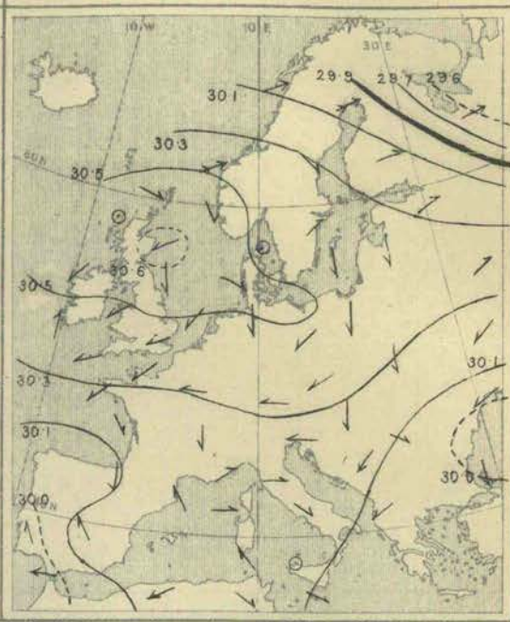


Weather fine and bright over the greater part of western, central, and southern Europe, but foggy on the eastern and southern shores of the North Sea, and dull over the northern and central parts of England and Ireland. Cloudy or overcast at most of the Norwegian, Russian, and Austrian stations, with rain at Bodö, and with snow at Kharkov and Odessa. A little rain falling during day in the west of Norway, but weather remaining fair and dry in nearly all other parts of Europe.

Temperature changed little and irregularly. Morning readings highest, 67° at Bilbao, 63° at Barcelona, and 60° at San Fernando and Algiers; above 55° at several of the Mediterranean and Spanish coast stations, and above 50° in the extreme south-west of our Islands. Lowest, 26° at Moscow, 29° at Hermanstadt, and 30° at St. Petersburg and Kiev; below 40° at the Russian and Austrian stations generally, as well as over central England. Rising during day to 60° and upwards at several of our own southern stations, and reaching 67° at Valencia (Ireland), but remaining below 45° on our east coasts. Exceeding 65° in Italy and exceeding 70° in many parts of France and Spain, the highest reading of all being 84° at Rochefort.

Barometer and Wind. 8 a.m. and 6 p.m.





Wind North-Easterly (Easterly to Northerly) over the greater part of England, Ireland, France, Spain, and Italy; light in force generally, but moderate to fresh over the Channel and Bay of Biscay. South-Westerly in the west of Norway, with a gale at Bodö, light from the Westward or North-Westward over the northern parts of Russia, Northerly or North-Westerly over Germany and Austria. Strong winds or gales from the Westward setting in later over the northern parts of Russia and Scandinavia generally; no important change occurring elsewhere.

Barometer highest, 30·6 ins. and upwards over Scotland and the north of Ireland; 30·4 ins. and upwards over central Russia; 30·2 ins. and upwards in an anticyclone covering all but the extreme northern, south-eastern, and south-western parts of Europe. Lowest, 29·9 ins. and less in a depression passing eastwards across the White Sea, and also in another disturbance lying over the extreme south of Russia; 30·0 ins. and less in a shallow system lying to the south-westward of Spain. Depression over northern Russia subsequently becoming deeper; no change occurring over western Europe.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are show by arrows, which are drawn flying *with the wind*, the force is indicated thus: ⟫⟶ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breese: and ⊙ = a calm. In the left-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Germany, Sweden, and Norway, and 7 a.m. in France, Algeria, Italy, Austria, and Russia; that for 6 p.m. is prepared from observations made at 6 p.m. in the British Islands and France, 7 p.m. in Algeria, 8 p.m. in Sweden and Norway, Germany, and Austria, and 9 p.m. in Russia, Belgium, and Italy. The time indicated in each case is the standard time for each country.

GENERAL NOTES.

During the greater part of the week a large anticyclone continued to prevail over all but the extreme northern and south-western portions of Europe, its central area being located, as a rule, over our Islands and their immediate neighbourhood. Westerly winds were, therefore, reported in the more northern, but Easterly breezes in the more southern countries, with variable airs in the intermediate regions, the weather being fair and dry over nearly the whole of the United Kingdom, with the central, eastern, and southern parts of the Continent. During the earlier half of the week, two rather deep depressions passed across the northern parts of Scandinavia and Russia, and occasioned Westerly gales in the extreme north of Europe, with considerable falls of snow in places. A shallow system also advanced northwards over Spain and the Bay of Biscay, and produced unsettled rainy weather in its immediate neighbourhood. At the close of the week, however, both series of disturbances had disappeared from our area, and anticyclonic conditions had become general over the entire Continent.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 80.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	46·5	?	50	?	EASTBOURNE	75·7	?	83	?
OSWALDKIRK (Yorkshire)	58·3	?	63	?	TENBY	72·1*	?	79*	?
WORKSOP	51·9	+25·5	56	+27	NEWQUAY	64·0	?	70	?
THURCASTON (Leicestershire)	66·5	+41·8	72	+46	TORQUAY	73·0*	?	80*	?
MARGATE	35·0	?	38	?	ARLEY COTTAGE (County Cavan)	44·2	?	48	?
WESTBOURNE (Sussex)	80·2*	?	89*	?	GUERNSEY	73·4*	?	81*	?
BRIGHTON	70·4	?	77	?					

* The values at Westbourne, Tenby, Torquay and Guernsey are obtained by Jordan's Photographic Recorder.

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WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; R. H. SCOTT, F.R.S., SECRETARY.

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VOL. X. No. 15.] *Third Series.* WEEK ENDING SATURDAY, 15TH APRIL, 1893. [*Price 6d*

[*Annual Subscription post paid*, £1 10s. 0d.

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871-90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the twenty-five years 1866-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the ten years 1881-90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

	DISTRICTS. (See p. 86.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 1st, 1893. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	66	26	50·9	34·2	42·1	0 (average)	33	+14	22	0	232	+104	469	-13
	1. SCOTLAND, EAST	66	23	52·8	34·1	43·1	1 above.	41	+14	22	0	285	+ 94	527	+ 6
	2. ENGLAND, N.E.	61	24	51·8	35·0	43·0	1 below.	36	+12	20	+ 1	306	+126	425	-40
	3. ENGLAND, EAST	70	23	54·2	34·0	43·7	1 below.	46	+11	22	+ 4	387	+156	515	- 9
	4. MIDLAND COUNTIES	68	21	56·1	32·7	43·9	1 below.	52	+17	26	+ 7	446	+192	497	-15
	5. ENGLAND, SOUTH	70	24	54·7	36·8	45·3	1 below.	45	+ 8	15	+ 3	407	+129	371	-27
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	64	27	54·7	36·4	45·1	1 above.	45	+17	16	+ 1	318	+122	354	-34
	7. ENGLAND, N.W.	67	24	53·7	36·8	44·8	0 (average)	41	+13	15	+ 1	346	+148	323	-69
	8. ENGLAND, S.W.	69	23	55·2	37·8	46·1	0 (average)	46	+13	12	+ 2	443	+148	246	-55
	9. IRELAND, NORTH	66	29	54·9	39·1	46·6	2 above.	44	+11	8	- 4	363*	+ 97	258*	-81
	10. IRELAND, SOUTH	65	28	56·8	38·1	47·0	1 above.	51	+14	11	+ 1	464	+105	178	-85
	—CHANNEL ISLANDS	63	36	55·0	43·9	49·1	1 above.	50	+13	0	- 2	563	+203	70	-51

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 86.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the mean for the Week.	From Jan. 1st, 1893. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 1st, 1893. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	4	5	2 less.	71	-2	14·1	- 1·1	32	- 11	33	-10	248	- 4	24	0
	1. SCOTLAND, EAST	3	4	1 less.	55	-2	6·4	- 2·1	36	0	37	0	334	+ 40	32	+ 4
	2. ENGLAND, N.E.	1	less than ½	4 less.	45	-8	4·6	- 1·8	54	+ 24	56	+20	376	+119	35	+ 11
	3. ENGLAND, EAST	1	less than ½	4 less.	50	-2	5·1	- 1·1	49	+ 12	52	+11	414	+102	38	+ 9
	4. MIDLAND COUNTIES	0	—	4 less.	48	-2	4·9	- 2·3	50	+ 20	53	+21	406	+132	37	+ 12
	5. ENGLAND, SOUTH	0	—	4 less.	48	-1	6·0*	- 1·5	53	+ 20	56	+18	427	+142	39	+ 13
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	1	3	4 less.	58	-3	10·1	- 5·3	47	+ 14	49	+13	344	+ 70	32	+ 7
	7. ENGLAND, N.W.	0	—	5 less.	49	-8	6·4	- 2·5	53	+ 23	56	+24	356*	+ 90	33	+ 8
	8. ENGLAND, S.W.	0	—	6 less.	49	-8	8·8	- 2·8	64	+ 27	68	+28	462	+128	42	+ 11
	9. IRELAND, NORTH	1	1	5 less.	60	-5	8·0	- 1·9	34	0	36	0	298	+ 23	28	+ 2
	10. IRELAND, SOUTH	1	1	5 less.	52	-8	8·9	- 2·9	58	+ 21	61	+22	363	+ 30	33	+ 2
	—CHANNEL ISLANDS	1	less than ½	5 less.	57	-6	7·4	- 2·2	55	+ 18	59	+19	496	+ 99	45	+ 9

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather again continued very fine and bright in almost all parts of the Kingdom. In the extreme north of Scotland, however, some slight rain fell occasionally, and by the end of the period the fall was general over Ireland and the north of England also.

Temperature for the whole week did not differ materially from the normal, but it was generally low during the middle part of the period and high both at the beginning and the end. The highest of the maxima were recorded on the 9th in Scotland and on the 10th in England and Ireland, and varied from 70° in England S. and E., and from 66° in Scotland N. and E., and the north of Ireland, to 63° in the Channel Islands, and to 61° in England N.E. The lowest of the minima were registered, as a rule, on the 13th, when they ranged from 21° in the Midland Counties, and 23° in Scotland E., England E. and England S.W., to 29° in Ireland N., and 36° in the Channel Islands. The diurnal range was again rather large at the inland stations, but less so than during the two preceding weeks.

Rainfall was less than the mean in all districts. The greater part of England was again rainless, while in the Irish districts there was no more than a tenth of an inch. In Scotland the fall was more decided, amounting to between three and five tenths.

Bright Sunshine showed a rather considerable decrease, but was still fairly abundant, and exceeded the mean in nearly all districts. The percentage of the possible duration ranged from 33 to 49 in Scotland, from 36 to 61 in Ireland, and from 52 to 68 over England. In the Channel Islands the percentage was 59.

Barometer and Wind.—The distribution of pressure was again anticyclonic. The central part of the high-pressure area was in the north during the early part of the week, but subsequently moved slowly southwards over our Islands to France. North-Easterly and Easterly breezes were consequently prevalent at first, but afterwards the wind shifted to the South-Westward and Westward very generally. At the end of the period a large depression was shown far to the northward of Scotland, and the wind at our extreme northern stations was increasing in force from the South-Westward.

* This value has been altered owing to the receipt of further information.

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II.—DATA from which the SUMMARY on page 85 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°				Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	52	31	47·0	35·6	41·0	+ 0·2	14	24	6	0·27	−0·23	*	*	*	*
	Stornoway	60	31	50·0	36·4	42·9	+ 0·4	30	16	6	0·20	−0·42	24·1	−10·4	25	−10
	Wick	61	28	50·7	33·6	41·7	− 0·7	24	32	2	0·10	−0·28	*	*	*	*
	Lairg §	66	26	51·4	29·1	39·7	− 2·0	26	48	4	0·39	−0·13	*	*	*	*
	Glencarron §	63	31	51·1	33·4	41·8	− 0·4	25	33	6	0·96	−0·03	*	*	*	*
	Fort Augustus §	66	28	53·8	34·2	43·5	+ 0·5	43	22	4	0·50	+0·02	30·1	?	31	?
	Fort William §	57	31	52·6	36·9	44·4	0·0	38	14	3	0·81	+0 01	41·1	?	42	?
1. SCOTLAND, E.	Nairn	65	29	52·9	34·0	43·0	− 0·3	41	22	4	0·49	+0·19	*	*	*	*
	Aberdeen	59	29	51·4	34·9	42·8	0·0	35	20	3	0·09	−0·41	32·5	+ 0·3	34	0
	Braemar §	63	23	51·2	28·7	39·4	− 0·5	26	49	3	0·51	−0·04	38·0†	?†	39†	?†
	Ochtertyre §	66	29	56·3	33·4	44·3	+ 1·3	52	24	1	0·54	−0·02	*	*	*	*
	Leith	59	32	51·9	37·9	44·6	+ 0·2	35	11	2	0·40	+0.02	*	*	*	*
	Marchmont §	60	31	53·3	35·9	44·2	+ 2·0	41	17	2	0·37	−0·20	40·3	?	42	?
2. ENGLAND, N.E.	Alnwick Castle	56	28	50·3	35·7	42·7	+ 0·6	31	18	2	0·14	−0·39	*	*	*	*
	Durham	61	24	53·8	32·6	42·7	− 0·6	44	26	1	0·02	−0·48	42·9	+16·9	44	+17
	Shields	60	28	50·4	34·7	42·2	− 1·1	32	20	1	0·04	−0·38	*	*	*	*
	Scarborough 𝔐	58	35	49·8	36·0	42·6	− 1·4	29	17	1	0·01	−0·47	*	*	*	*
	York	68	29	57·4	34·0	45·1	+ 0·3	55	22	1	0·03	−0·37	60·5	+31·5	64	+34
	Spurn Head	58	33	48·9	37·1	42·7	− 1·0	25	14	0	—	−0·34	*	*	*	*
3. ENGLAND, E.	Hillington 𝔐	62	25	53·9	32·2	42·5	− 2·5	45	27	0	—	−0·41	43·9	+11·4	46	+12
	Yarmouth	60	36	48·4	37·7	42·8	− 1·0	24	12	2	0·03	−0·37	*	*	*	*
	Geldeston	64	31	53·0	35·1	43·6	− 1·4	40	19	2	0·04	−0·33	40·1	+ 3·1	42	+ 2
	Cambridge	70	24	59·4	33·4	45·8	+ 0·1	63	24	0	—	−0·39	53·2	+18·6	56	+20
	Rothamsted	66	23	56·1	31·8	43·6	− 1·0	54	29	0	—	−0·48	59·8	?	63	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	68	29	58·0	33·9	45·6	+ 0·4	59	23	0	—	−0·37	*	*	*	*
	Loughborough	66	24	57·7	33·3	44·9	− 0·9	57	24	0	—	−0·42	*	*	*	*
	Stamford (Ketton Hall)	64	21	55·6	32·4	43·4	− 2·3	50	27	0	—	−0·45	*	*	*	*
	Cheadle 𝔐	65	31	55·3	35·4	44·9	+ 1·2	48	18	0	—	−0·50	*	*	*	*
	Churchstoke 𝔐	63	22	54·1	29·5	41·2	− 2·3	34	48	0	—	−0·42	44·1	+12·7	46	+13
	Hereford 𝔐	65	27	56·0	32·9	44·0	− 1·7	52	25	0	—	−0·42	*	*	*	*
	Cirencester	63	22	55·1	30·6	42·3	− 2·1	50	32	0	—	−0·51	54·8	+22·8	58	+23
	Oxford	67	27	57·1	33·9	45·0	− 0·7	55	23	0	—	−0·42	52·6	+20·1	55	+21
5. ENGLAND, S.	London	68	31	56·6	36·0	45·8	− 1·1	52	17	0	—	−0·44	43·0†	+14·2†	45†	+16†
	North Foreland	58	35	48·7	39·3	43·8	− 1·0	23	8	0	—	?	*	*	*	*
	Strathfield Turgiss 𝔐	67	24	59·2	31·3	44·6	− 1·3	63	30	0	—	−0·42	*	*	*	*
	Dungeness	58	29	50·6	37·4	43·7	− 1·7	31	13	0	—	−0·40	*	*	*	*
	Hastings (St. Leonards)	65	35	52·0	38·0	44·7	− 2·1	36	11	0	—	−0·47	48·7	+10·5	52	+11
	Southampton	70	30	59·1	34·7	46·3	− 0·6	61	20	0	—	−0·49	63·5	+26·1	68	+28
	Hurst Castle	64	32	54·9	37·0	45·5	− 0·3	46	14	0	—	−0·42	*	*	*	*
	Stowell 𝔐	66	36	56·3	40·6	48·1	+ 2·7	49	4	0	—	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	64	32	56·3	37·1	46·2	+ 1·4	50	14	4	0·72	−0·26	*	*	*	*
	Glasgow	60	34	52·9	38·7	45·3	+ 1·6	37	9	1	0·45	−0·09	36·7	+ 8·0	38	+ 9
	Ardrossan	58	34	53·0	38·3	45·3	+ 0·5	39	10	1	0·17	−0·35	*	*	*	*
	Glenlee §	64	27	57·5	33·1	44·7	+ 2·0	56	25	1	0·02	−0·66	*	*	*	*
	Douglas (Isle of Man)	62	30	53·7	34·8	43·8	− 0·8	43	20	0	—	−0·57	57·4	+17·3	60	+18
7. ENGLAND, N.W.	Newton Reigny	67	24	56·7	32·0	43·8	+ 1·1	55	28	1	0·01	−0·44	54·5	+22·5	57	+23
	Stonyhurst	63	28	54·0	34·7	43·9	− 0·6	44	20	0	—	−0·57	61·4	+30·9	65	+33
	Blackpool 𝔐	61	30	54·4	37·0	45·3	+ 0·5	44	14	0	—	−0·41	49·2	+16·8	52	+19
	Manchester	65	33	51·3	35·8	43·2	− 1·5	34	17	0	—	−0·48	51·3†	?	54†	?
	Liverpool Obsy. (Bidston)	60	34	53·9	38·6	45·9	+ 0·1	42	10	0	—	−0·37	*	*	*	*
	Llandudno 𝔐	59	35	53·7	38·9	45·9	− 0·4	40	9	0	—	−0·42	49·3	+18·8	52	+21
	Holyhead	55	37	52·0	40·4	45·9	− 0·2	34	4	0	—	−0·45	*	*	*	*
8. ENGLAND, S.W.	Llandovery	69	23	58·1	31·4	44·1	− 0·6	59	30	0	—	−0·67	*	*	*	*
	Pembroke	63	36	54·0	41·0	47·2	+ 1·6	41	3	0	—	−0·46	60·5	+19·1	64	+21
	Arlington (N. Devon)	65	29	55·4	34·9	44·7	+ 0·3	49	20	0	—	−0·66	*	*	*	*
	Cullompton 𝔐	69	27	58·2	34·0	45·5	− 0·2	58	22	0	—	−0·58	65·8	+32·3	70	+35
	Falmouth	57	36	52·9	42·4	47·4	+ 0·6	38	0	0	—	−0·70	64·8	+25·5	69	+28
	Plymouth	65	33	55·3	40·9	47·8	0·0	45	3	0	—	−0·57	68·9	+30·4	73	+32
	Prawle Point	61	34	52·4	40·0	45·9	+ 0·2	36	6	0	—	−0·50	*	*	*	*
9. IRELAND, N.	Malin Head	57	41	51·7	43·1	47·2	+ 2·1	36	0	1	0·24	?	*	*	*	*
	Londonderry	66	35	56·3	39·9	47·7	+ 1·8	49	6	1	0·23	−0·29	*	*	*	*
	Edenfel (Omagh)	60	30	55·0	37·9	46·0	+ 1·4	45	11	0	—	−0·50	*	*	*	*
	Mullaghmore															*
	Belmullet	60	38	53·0	42·6	47·6	0·0	39	0	2	0·10	?	*	*	*	*
	Markree Castle	61	29	55·7	36·4	45·6	+ 0·7	49	16	2	0·07	−0·50	30·8	− 2·9	32	− 3
	Brookeborough	63	30	57·0	36·0	46·0	+ 1·9	53	17	0	—	−0·59	*	*	*	*
	Armagh	60	31	54·9	36·4	45·2	− 0·3	46	16	4	0·03	−0·47	32·1	+ 1·7	34	+ 2
	Donaghadee	59	42	53·6	42·9	48·0	+ 3·2	42	0	1	0·02	−0·43	*	*	*	*
	Edgeworthstown	62	31	57·1	36.3	46·2	+ 2·3	53	16	0	—	−0·55	*	*	*	*
10. IRELAND, S.	Dub in	61	36	54·9	41·0	47·6	+ 1·5	43	3	0	—	−0·48	67·4	+30·7	71	+33
	Parsonstown	64	31	57·6	36·6	46·6	+ 1·1	55	15	1	0·02	−0·49	53·4	+17·7	56	+18
	Kilkenny	65	28	57·3	35·0	45·6	− 0·2	55	20	1	0·03	−0·49	*	*	*	*
	Waterford	65	28	57·0	34·0	45·0	− 1·7	55	22	0	—	−0·61	*	*	*	*
	Roche's Point	60	37	54·4	40·9	47·3	0·0	42	3	0	—	−0·75	*	*	*	*
	Valencia	63	33	56·9	40·4	48·3	+ 0·6	51	4	1	0·35	−0·53	54·5	+15·5	57	+16
	Killarney	65	29	58·0	35·4	46·2	− 0·8	57	18	1	0·18	?	*	*	*	*
	Foynes	64	37	58·1	41·8	49·6	+ 3·1	54	1	1	0·29	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	57	41	53·9	44·6	49·0	+ 1·2	49	0	0	—	−0·54	*	*	*	*
	Jersey	63	36	56·0	43·1	49·2	+ 1·0	50	0	1	0·01	−0·49	61·2	+18·0	65	+19

Stations marked 𝔐 are in connection with the Royal Meteorological Society, and those marked § with the Scottish Meteorological Society.

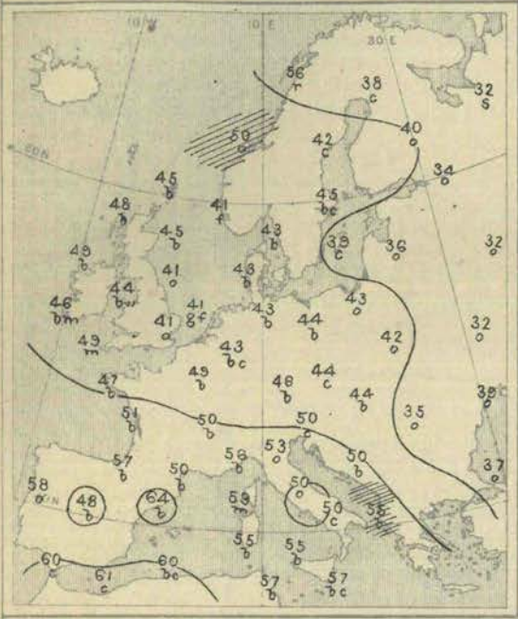
* An asterisk is inserted in all places for which the information is not usually received.

† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

Sunday, 9th April.

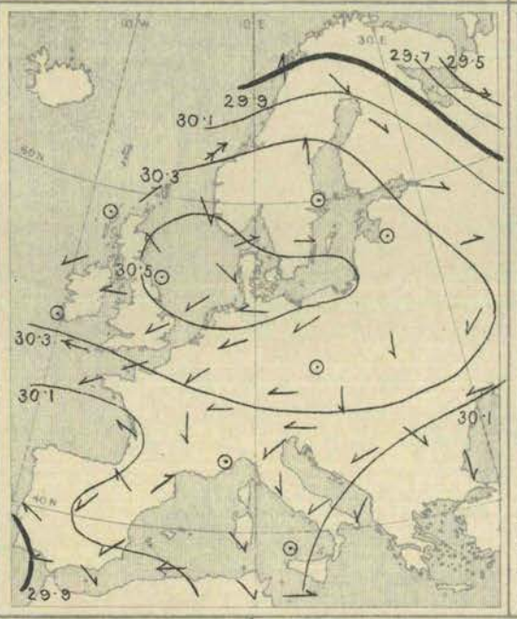
Temperature and Weather.

8 a.m.

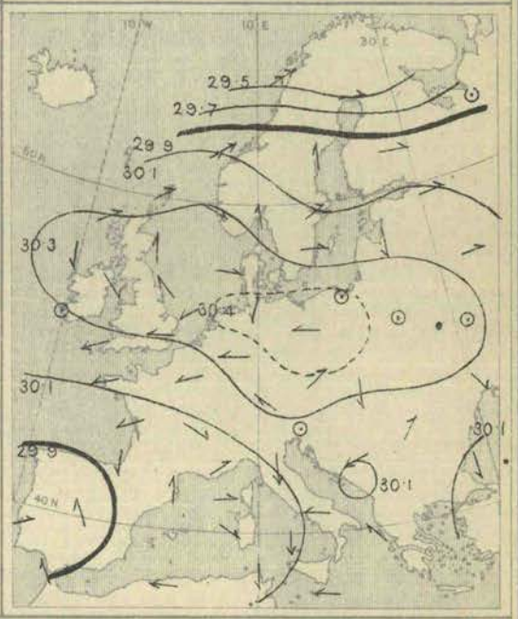


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning fine and bright over the greater part of western, central, and southern Europe, dull over eastern and central England, as well as northern Italy; fog reported on our south-east coasts, in the Netherlands, and the south of Norway, cloudy in Sweden; dull in Norway and Russia, with rain at Bodö. Clearing over England later, and remaining very dry in most parts of western Europe; slight rain falling in the north of Scotland, larger amounts in west of Norway and at Lisbon.

Temperature fallen in most parts of the United Kingdom, changed irregularly elsewhere. Morning readings highest, 64° at Barcelona and 61° at Oran; above 55° at most of the Mediterranean stations and on the coasts of Spain. Lowest, 32° at Archangel, Moscow, Lemberg, and Kiev, below 40° over Russia, Austria, and some parts of central England. Rising later to between 60° and 65° in many parts of the United Kingdom, but remaining below 50° in the north and east of England. Exceeding 70° at many of the French stations, and touching 88° over central Algeria.

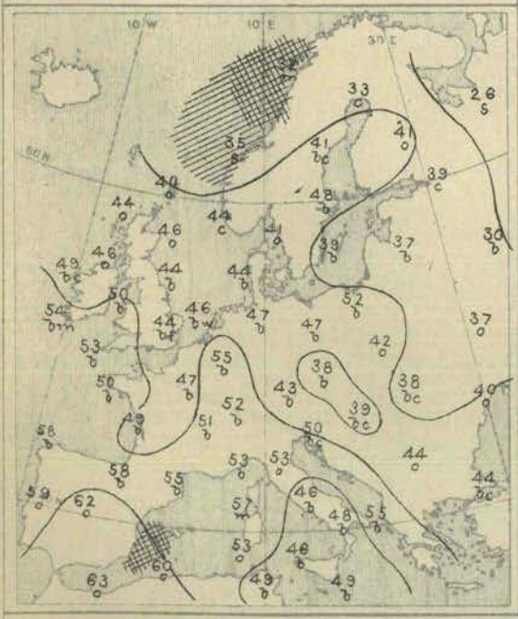
Wind light or moderate from the Eastward and North-Eastward over England, Ireland, France, and the greater part of central, southern, and eastern Europe, calm or variable in the north of Scotland and the south of Scandinavia, Westerly or North-Westerly over the northern parts of Russia and Scandinavia. Light in force generally, but strong to a gale at Christiansund. No important change in our Islands later, but South-Westerly gale extending to Finmark, and Westerly wind increasing over Lapland.

Barometer highest, 30·5 ins. and upwards over the north-east of England, over Denmark, and the extreme north of Germany; 30·2 ins. and upwards in an anticyclone covering the greater part of Europe. Lowest, 29·5 ins. and less in a well-marked depression over northern Russia, 29·9 ins. and less off the Portuguese coasts. General fall taking place over western Europe during day; large depression advancing towards the north-west of Norway, and a less important system over the west of Spain.

Monday, 10th April.

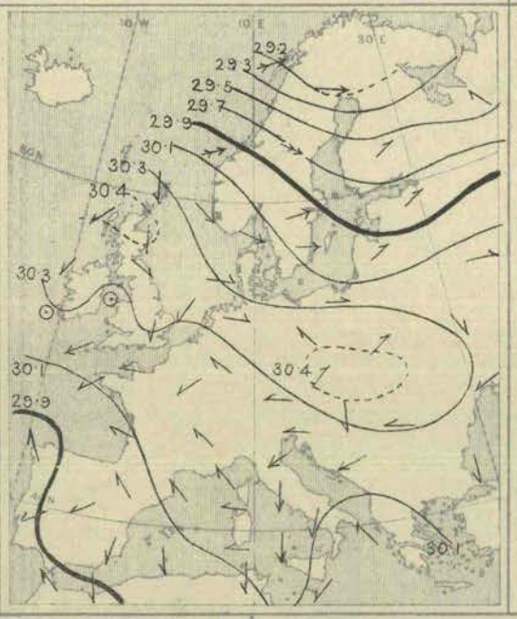
Temperature and Weather.

8 a.m.

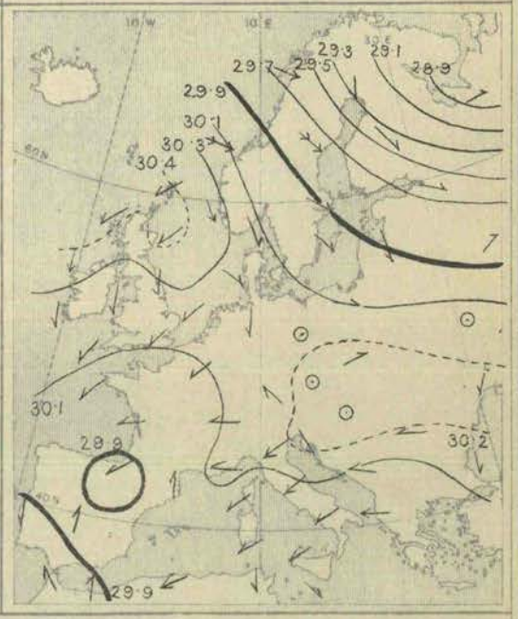


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning dull and unsettled in the extreme north and north-west of Europe, with snow in several places, rain at Nairn; dull, but fair, in the south of Russia, as well as over Algeria and the south of Spain, with rain at San Fernando. A little rain in Scotland and snow in the west of Norway later, and larger quantities at San Fernando, Oran, and Aumale, but weather remaining very fine over Germany, France, and the greater part of England and Ireland.

Temperature changing little and irregularly. Morning readings exceeding 60° on the Algerian coast and at some of the Spanish stations, and exceeding 50° over the south of France and the south-west of our Islands; below 40° over our midland counties and over Russia, and lowest of all, 26° at Archangel, 30° at Moscow, 32° at Bodö, and 37° at Riga; as low as 38° in the west of Austria also. Rising later to between 60° and 70° over the inland parts of England, to 74° at Paris, and to 60° and more over Italy, but not quite touching 60° at Nice.

Wind Westerly over the whole of northern Europe, and strong to a gale in force at the Scandinavian stations; very light and variable in Scotland, light Northerly in Ireland, and North-Westerly on our north-east coasts; fresh from East to North-East in the Channel, moderate from East over the Bay of Biscay, and rather strong from North-East and North over the Adriatic and eastern part of the Mediterranean. Veering Northwards over Scandinavia and the Baltic later, little change elsewhere.

Barometer highest, 30·4 ins. and more to 30·2 ins. in a very complex anticyclone stretching from the Atlantic across the British Islands and the Netherlands to central Europe. Lowest, 29·2 ins. and less in a somewhat deep depression over Lapland, and 29·9 ins. and less over Portugal, the west of Spain, and Algeria; gradients steep over northern Europe only. Barometer rising a little over Scandinavia later, falling fast to 28·9 ins. and less over northern Russia, not changing much in our Islands.

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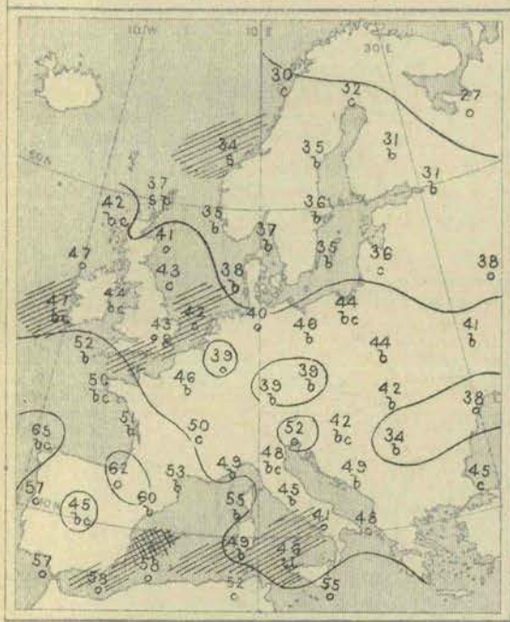
Tuesday, 11th April.

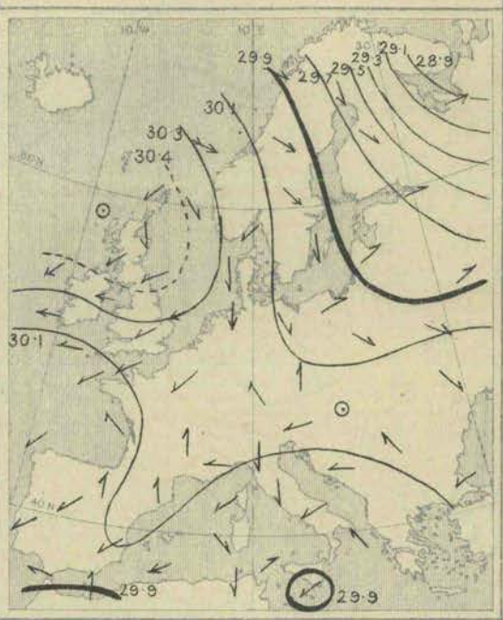
Temperature and Weather.

8 a.m.

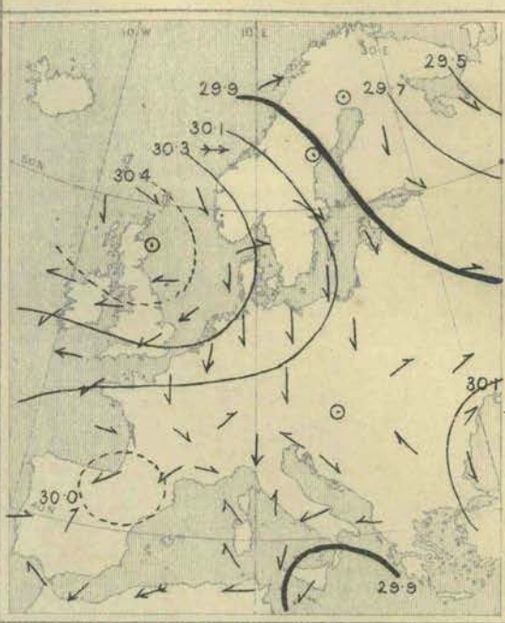


Barometer and Wind.

8 a.m.



6 p.m.



Weather fine and bright over the greater part of Europe, but dull over the north of Ireland, the south of Scotland, and the eastern and central parts of England. Snow reported both at Christiansund and Sumburgh Head. Sky clearing later in most parts of England, but showers falling in the Shetlands, Hebrides, and west of Norway, as well as at Jersey, the north-west of France, and at some Algerian stations. Solar halo over London in afternoon.

Temperature fallen generally. Morning readings highest, 65° at Corunna, 62° at Biarritz, 60° at Barcelona; above 50° in the west of France, at Scilly and Jersey. Lowest, 27° at Archangel, 30° at Bodö, 31° at Uleaborg, Kuopio, and St. Petersburg, and 32° at Haparanda; below 40° over the greater part of Scandinavia, Denmark, and Russia, and the north of Scotland. Daily maxima below 50° in many parts of our Islands, below 55° at all stations excepting Valencia (Ireland). Exceeding 70° in some of the southern and western parts of France, not reaching 60° at Nice.

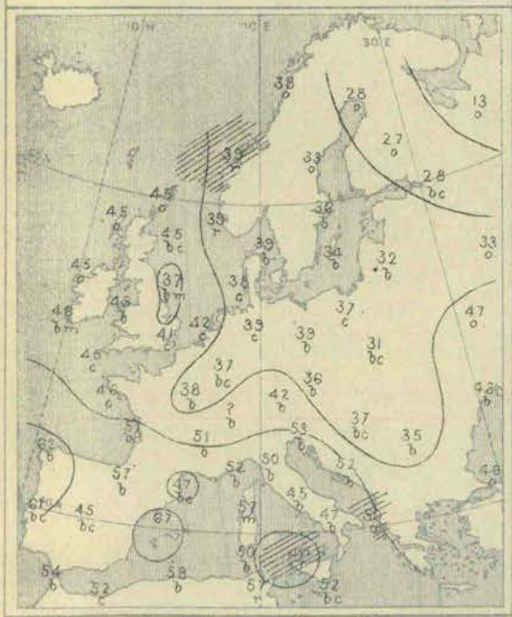
Wind light from the Southward or South-Eastward over the southern parts of France, moderate to strong from the Eastward or North-Eastward over Ireland, England, the Netherlands, and the north of France; calm in the north of Scotland. Strong from the North-Westward in Scandinavia, and light or moderate from the same quarter in Finland. Westerly or South-Westerly over the greater part of Russia, North-Easterly in Spain, variable in Italy, Austria, and Algeria. No important change during day.

Barometer highest, 30·4 ins. and upwards over the northern parts of our Islands and the North Sea; 30·1 ins. and upwards in an anticyclone of irregular form covering the greater part of western, central, and eastern Europe. Lowest, 28·9 ins. and less in a deep depression lying over the extreme north of Russia, 29·9 ins. and less in shallow systems lying respectively over Morocco and to the southward of Sicily. No important change occurring over western Europe during day.

Wednesday, 12th April.

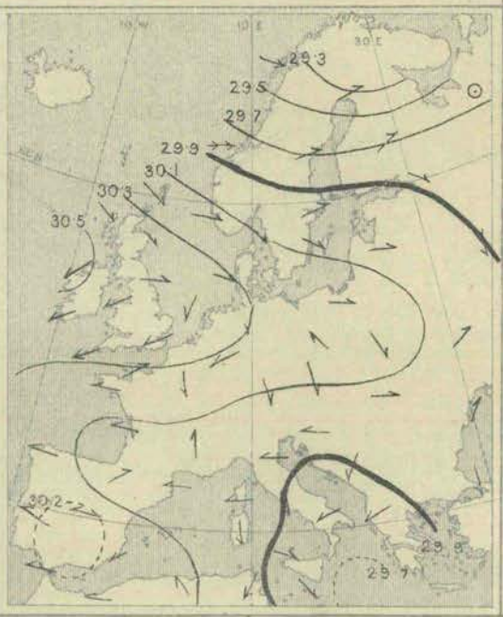
Temperature and Weather.

8 a.m.

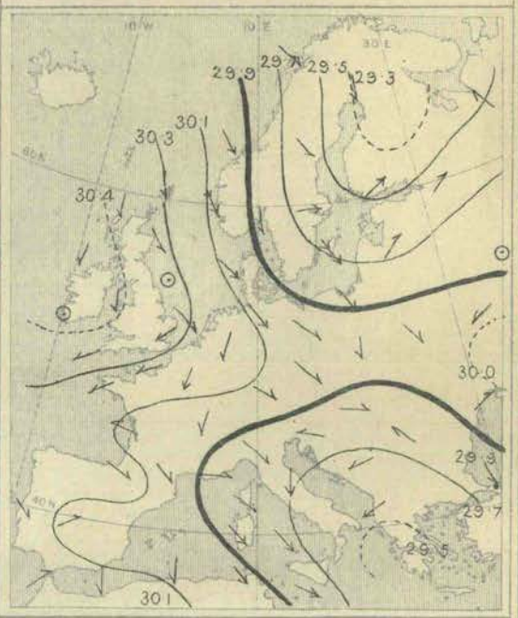


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning dull and unsettled over the extreme northern and north-western parts of Europe, including the north of Scotland, with rain in the west of Norway, and a threatening appearance at Wick, fine and bright over Ireland, the greater part of England, France, southern and central Europe; dull, rainy, and unsettled over Tunis and in Sicily. Slight showers later in the north and east of Scotland, and also at Yarmouth and Brussels. Snow over Hungary and in the north of Russia. Weather remaining fine elsewhere.

Temperature falling over England and northern Russia. Morning readings below 60° except on the Portuguese coasts and at Barcelona, and below 50° over the British Islands, the north and east of France and the greater part of Italy. Lowest, (1) 13° at Archangel, 26° at Uleaborg, 28° at St. Petersburg, 33° at Moscow, Hernosand, and Bodö; (2) 31° at Warsaw, 32° at Breslau, 37° at York, 38° at Paris. Failing to reach 60° over our Islands later, but touching 52° at Cambridge, 57° at Leith, also 56° at Paris, 70° at Rochefort, 70° and more in some parts of Spain and Algeria, 77° at Perpignan.

Wind Westerly to North-Westerly over the northern countries and blowing a gale on the north-west coast of Norway; North-Easterly to Easterly, fresh, in the English Channel, moderate over the Bay of Biscay: very light and variable over central Europe, but North-Easterly over Italy, Northerly at Cagliari, North-Westerly at Palermo and Malta. Becoming more Northerly in our Islands and Norway later, but still blowing a gale at Christiansund and Skudesnaes.

Barometer highest, 30·5 ins. and more to 30·3 ins. in the eastern portion of an anticyclone spreading in from the Atlantic over the British Islands and North Sea, and exceeding 30·2 ins. over central Spain. Lowest, 29·4 ins. and less in a depression over Lapland, and below 29·8 ins. in another lying between Malta and Greece. Northern depression apparently moving south-eastwards later, and barometer falling slightly over the British Islands, quickly over the Baltic, Germany, and Denmark.

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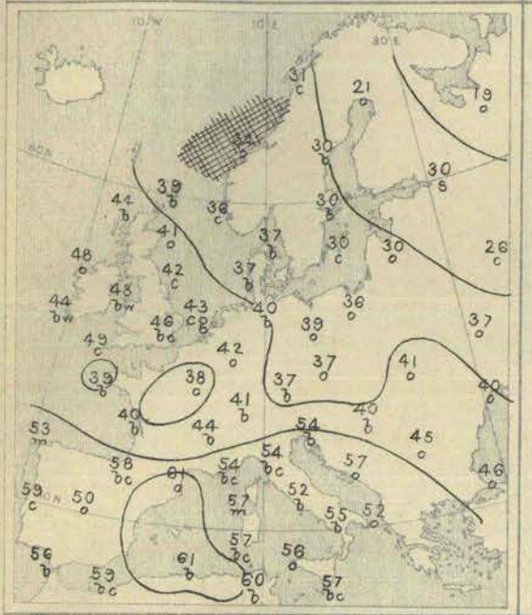
Thursday, 13th April.

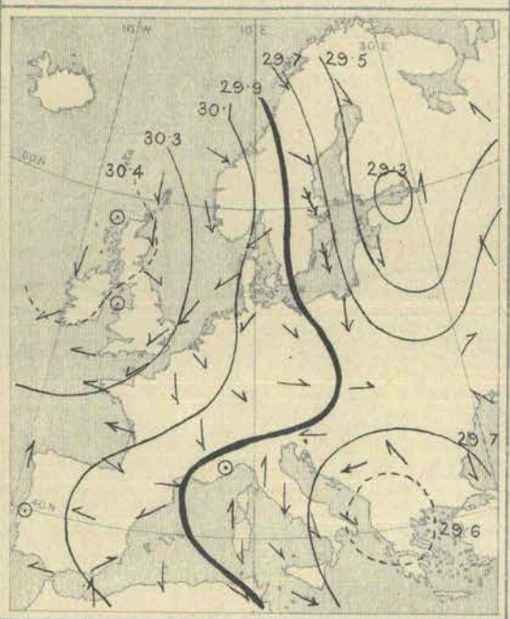
Temperature and Weather.

8 a.m.

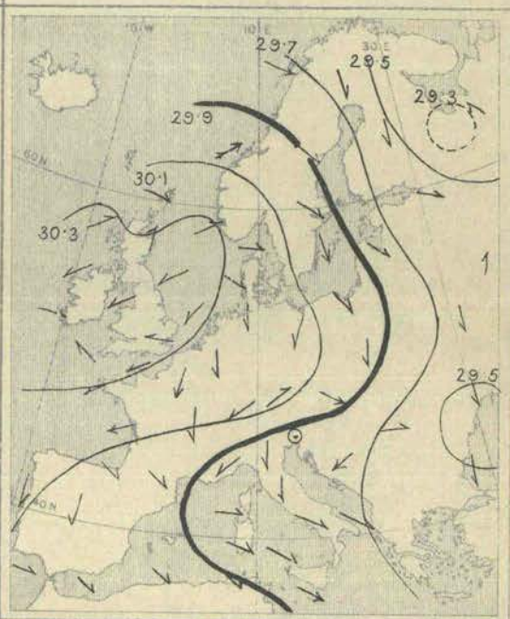


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning fine and bright over western Europe generally, as well as at many of the south-eastern stations, and over the Mediterranean; changeable over Scandinavia and northern Russia, with snow at Christiansund and St. Petersburg. Rain locally at Cape Gris Nez, and extremely slight showers over some of the south-eastern parts of England. Some rain later at a few northern and north-western stations, snow over Hungary and the south of Russia, but weather fine elsewhere.

Temperature fallen over Scandinavia and Scotland, risen over England, southern and south-eastern Europe. Morning readings highest, 61° at Perpignan and Algiers, 60° at La Calle: above 50° over southern Europe generally, and above 40° over Ireland, England, and the west and north of France. Lowest, 16° at Uleaborg, 19° at Archangel, 24° at Hangö, 26° at Moscow, and 30° on the Swedish coasts generally; 37° at Breslau and Munich, 38° at Paris, 39° at Berlin, Dungeness, Wick, and Sumburgh Head. Failing to reach 55° in our Islands later, except at one or two western stations; not reaching 50° over Germany and the Netherlands, but touching 64° at Rochefort, 66° at Nice, 70° at Perpignan, and rather higher over Italy.

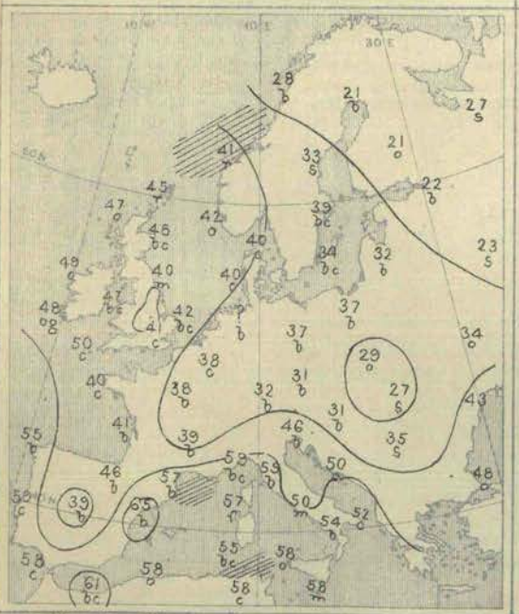
Wind light and anticyclonic over the greater part of the Kingdom; North-Westerly to Northerly over Sandinavia, the Baltic, and the southern sides of the North Sea—blowing with considerable force generally, and a gale at several Baltic stations; variable from North-West and West over central Europe, from South over Russia. Easterly over the northern part of the Adriatic, Northerly over the south of Italy, North-Westerly over Sicily and Malta. Becoming South-Westerly in the north of Scotland later, but blowing freshly from North-East on our south-east coasts all day. Gale over Baltic moderating.

Barometer highest, 30·4 ins. and more to 30·2 ins. in the south-eastern part of an anticyclone spreading from the Atlantic over the British Isles, the North Sea, and the north of France. Lowest, 29·5 ins. and less in a depression over the White Sea and north of Russia, and in a secondary over the Gulf of Finland, 29·6 ins. and less over the southern parts of the Adriatic, and 29·8 ins. and less in a secondary system lying off the south-east of France. Rising over the Baltic later, but beginning to fall in the northern and western portions of the United Kingdom.

Friday, 14th April.

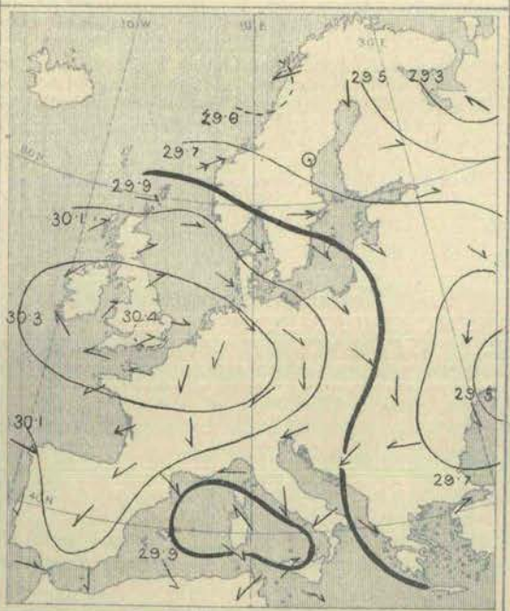
Temperature and Weather.

8 a.m.

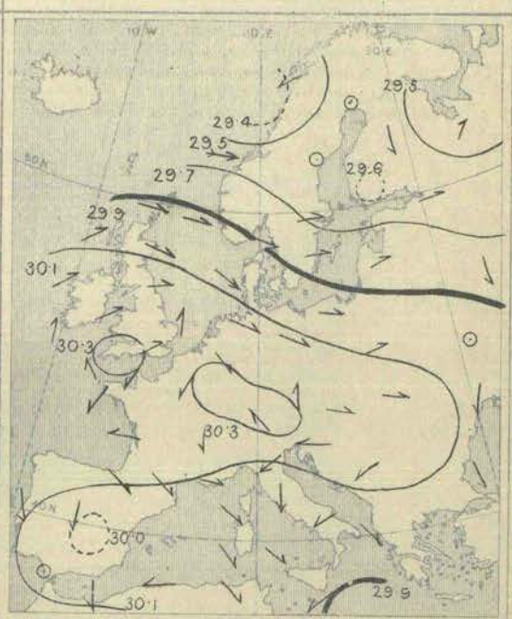


Barometer and Wind.

8 a.m.



6 p.m.



Weather fair or fine over the greater part of our Islands and the Continent, but dull on our extreme western and northern coasts and in the west of Norway, with rain at Sumburgh Head and Christiansund. Dull over the central and southern parts of Russia and in eastern Austria, with rain at Kharkov, and with snow at Moscow and Hermanstadt, as well as at Hernösand. Rain falling later over Scandinavia and the extreme north of Scotland, no important change occurring elsewhere.

Temperature risen over the United Kingdom, Scandinavia, and Denmark, fallen in most other countries. Morning readings highest, 65° at Barcelona, 61° at Nemours and Oran, and 59° at Nice and Lisbon: above 55° at most of the Mediterranean stations. Lowest, 17° at Uleaborg, 21° at Haparanda and Kuopio, 22° at St. Petersburg, and 26° at Helsingfors; below the freezing point in Poland and the southern parts of Germany, and very little above it over central England. Rising later to a little above 60° at some of the English stations, to between 65° and 70° in the west and south of France and over Italy, and to between 70° and 79° over Algeria. Frost occurring over the inland parts of England at night.

Wind light to moderate from the Eastward or North-Eastward over France, Spain, and the extreme south of our Islands, but South-Westerly or Westerly in all the more northern parts of the United Kingdom; strong to a gale from the Westward at some of the Scandinavian stations, North-Westerly in Denmark, Germany, and Austria, and Northerly over the greater part of Italy and the south of Russia. Variable in Algeria. Southerly and South-Westerly breezes setting in later over the southern parts of our Islands, no important change occurring elsewhere.

Barometer highest, 30·1 ins. to 30·4 ins. in an anticyclone covering our Islands, the North Sea, Denmark, Germany, France, and the greater part of Spain. Lowest, 29·3 ins. and less over the extreme north of Russia, and also in a well-marked depression lying over the south of that country; 29·6 ins. and less in a shallow disturbance off the north-west of Norway, 29·9 ins. and less in a still shallower system over Corsica, Sardinia, and the neighbouring parts of the Mediterranean. Gradual fall of barometer taking place over north-western and western Europe during day.

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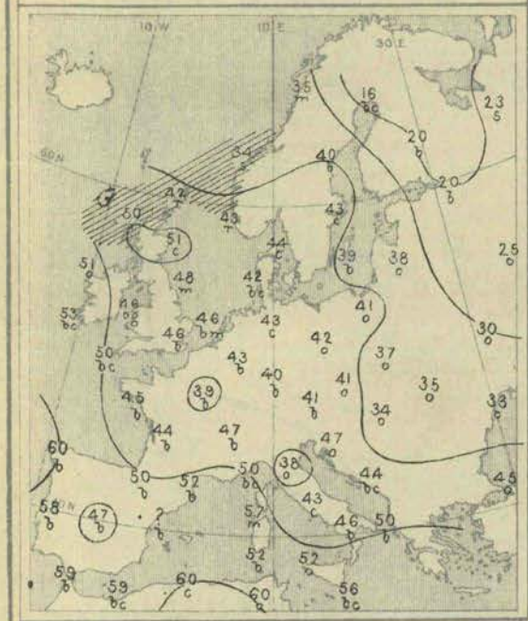
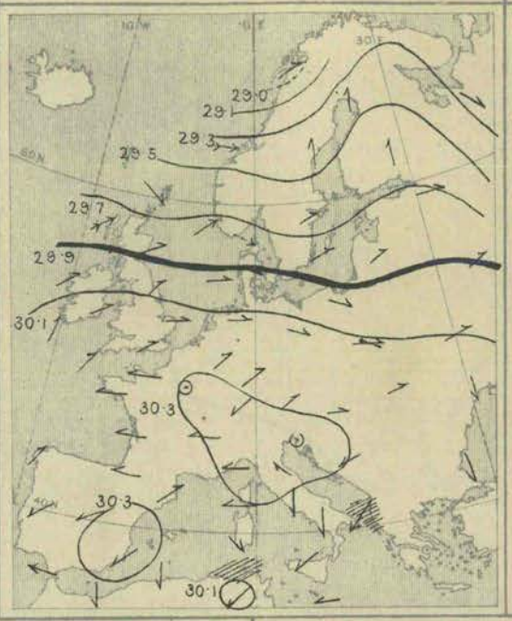
Saturday, 15th April.

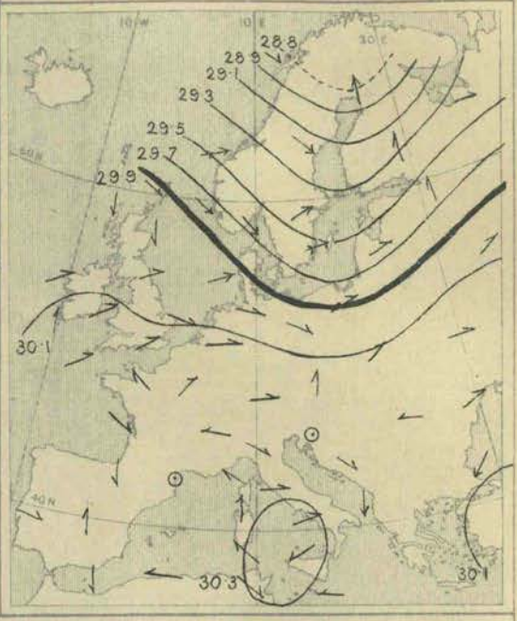
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning still fine and bright over the Mediterranean, south-western and western Europe, changeable over the more northern countries with snow over the Gulf of Finland and at Christiansund, rain at Skudenaes and at Sumburgh Head, Stornoway, and Malin Head: dull over eastern Europe, with snow at Kharkov. Rain setting in later over Ireland and the northern half of Great Britain, snow over Finland and the north of Russia.

Temperature risen over the United Kingdom, central Europe, and the Baltic, fallen over south-eastern Europe, Italy, and the Mediterranean. Morning readings highest, 50° to 60° over southern Europe, and exceeding 50° in the extreme west of our Islands. Lowest, 16° at Haparanda, 34° to 35° in the north-west of Norway. Rising later to between 60° and 64° in many parts of England, and to 60° at Parsonstown; touching 68° at Paris, 70° at Rochefort, 77° at Biarritz, and 90° at Biskra (Algeria), but not exceeding 66° at any of the Italian stations.

Wind light from North-East and East over France and the Bay of Biscay, and very variable over the Channel: South-Westerly and moderate over the greater part of our Islands, but blowing hard at Stornoway; Westerly to Southerly over Scandinavia, and blowing a gale at Christiansund. Strong Westerly gale setting in over Scandinavia later, a Southerly gale over Finland, and strong Westerly winds over the Baltic, but wind veering to Northward in the north of Scotland and moderating.

Barometer highest, 30·3 ins. and more to 30·2 ins. over the Mediterranean, France, Germany, and south-eastern Europe. Lowest, 29·0 ins. and less off the coast of Finmark. Gradients moderate over the northern countries, slight in the south. Large and deep depression advancing over Lapland from the westward later, and developing a "V" shaped secondary over the Gulf of Bothnia.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are show by arrows, which are drawn flying *with the wind*, the force is indicated thus: ⇛ = a heavy gale; → = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breese: and ⊙ = a calm. In the left-hand Chart the weather is indicated as follows:—b = blue sky; c_c = detached clouds: o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Germany, Sweden, and Norway, and 7 a.m. in France, Algeria, Italy, Austria, and Russia; that for 6 p.m. is prepared from observations made at 6 p.m. in the British Islands and France, 7 p.m. in Algeria, 8 p.m. in Sweden and Norway, Germany, and Austria, and 9 p.m. in Russia, Belgium, and Italy. The time indicated in each case is the standard time for each country.

GENERAL NOTES.

This week, again, has been marked by unusually quiet and fine weather. Anticyclonic conditions were prevalent over the British Isles and central Europe during the first few days—accompanied by Westerly winds over the northern countries and Easterly in the south; and although cyclonic systems spread over northern and south-eastern Europe on Wednesday and Thursday, they disappeared subsequently, and on Friday the previously existing anticyclonic condition was restored.

Later in the day, however, a more decided change was in progress; the barometer began to fall decidedly over northern Europe, the anticyclone moved southwards, spread out considerably, and became much less clearly defined than it had been; Westerly to South-Westerly breezes set in over the United Kingdom, north Germany, and the Baltic, and showery weather began to extend over the northern countries generally.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 86.

Stations.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	Stations.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	32·6	?	34	?	EASTBOURNE	48·0	?	51	?
OSWALDKIRK (Yorkshire)	57·0	?	60	?	TENBY	60·7*	?	64*	?
WORKSOP	49·9	+21·8	53	+23	NEWQUAY	63·5	?	68	?
THURCASTON (Leicestershire)	49·4	+24·1	52	+24	TORQUAY	62·7*	?	67*	?
MARGATE	36·3	?	39	?	ARLEY COTTAGE (County Cavan)	39·9	?	42	?
WESTBOURNE (Sussex)	68·5*	?	73*	?	GUERNSEY	49·1*	?	52*	?
BRIGHTON	59·3	?	63	?					

* The values at Westbourne, Tenby, Torquay and Guernsey are obtained by Jordan's Photographic Recorder.

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WEEKLY WEATHER REPORT.

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VOL. X. No. 16.] *Third Series.* WEEK ENDING SATURDAY, 22ND APRIL, 1893. [*Price 6d.* [*Annual Subscription post paid*, £1 10s. 0d]

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871-90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the twenty-five years 1866-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the ten years 1881-90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

	DISTRICTS. (See p. 92.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 1st, 1893. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	70	26	54·7	38·6	46·3	3 above.	44	+21	10	− 7	276	+125	479	−19
	1. SCOTLAND, EAST	73	30	54·0	39·2	46·3	3 above.	42	+10	8	− 8	327	+106	535	+ 1
	2. ENGLAND, N.E.	74	35	54·5	40·9	47·4	3 above.	42	+13	3	− 7	348	+141	428	−47
	3. ENGLAND, EAST	84	31	64·1	40·7	51·8	6 above.	74	+35	4	− 9	461	+193	519	−15
	4. MIDLAND COUNTIES	81	26	68·0	42·5	54·6	8 above.	88	+47	0	−13	534	+242	497	−27
	5. ENGLAND, SOUTH	82	29	65·0	45·6	54·9	8 above.	90	+45	0	− 8	497	+179	371	−34
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	73	35	57·9	42·9	50·0	4 above.	56	+22	0	−11	374	+146	354	−41
	7. ENGLAND, N.W.	78	35	63·2	45·6	53·9	8 above.	83	+48	0	−10	429	+200	323	−76
	8. ENGLAND, S.W.	82	33	64·8	46·9	55·4	9 above.	94	+54	0	− 6	537	+205	246	−61
	9. IRELAND, NORTH	73	37	60·3	46·6	53·2	7 above.	78	+40	0	− 9	441	+140	258	−88
	10. IRELAND, SOUTH	73	42	61·9	49·9	55·6	8 above.	95	+53	0	− 7	559	+160	178	−90
	—CHANNEL ISLANDS	77	39	63·3	49·2	55·9	7 above.	97	+54	0	− 1	660	+259	70	−51

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 92.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the mean for the Week.	From Jan. 1st, 1893. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 1st, 1893. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in	10ths of in.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	4	3	3 less.	75	− 2	14·4	− 1·4	26	− 5	26	− 5	274	− 9	24	− 1
	1. SCOTLAND, EAST	4	4	1 less.	59	− 2	6·8	− 2·2	24	− 13	24	−12	358	+ 37	31	+ 3
	2. ENGLAND, N.E.	3	3	2 less.	48	− 9	4·9	− 2·0	31	0	31	0	407	+128	35	+ 11
	3. ENGLAND, EAST	2	1	3 less.	52	− 4	5·2	− 1·5	56	+ 20	57	+20	470	+128	40	+ 11
	4. MIDLAND COUNTIES	2	2	2 less.	50	− 4	5·1	− 2·6	49	+ 17	51	+18	455	+155	38	+ 13
	5. ENGLAND, SOUTH	1	less than ½	4 less.	49	− 4	6·0	− 2.0	56	+ 18	58	+17	483	+167	40	+ 13
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	4	8	2 more.	62	− 3	10·9	− 5·1	35	− 2	35	− 3	379	+ 76	32	+ 6
	7. ENGLAND, N.W.	3	4	0 (average)	52	− 8	6·8	− 2·6	36	+ 2	37	+ 1	392	+ 99	33	+ 8
	8. ENGLAND, S.W.	1	3	3 less.	50	−11	9·1	− 3·1	47	+ 5	48	+ 6	509	+140	42	+ 11
	9. IRELAND, NORTH	4	8	3 more.	64	− 4	8·8	− 1·6	29	− 6	30	− 6	327	+ 23	28	+ 2
	10. IRELAND, SOUTH	4	7	1 more.	56	− 7	9·6	− 2·8	26	− 14	26	−15	389	+ 24	33	+ 2
	—CHANNEL ISLANDS	1	2	3 less.	58	− 9	7·6	− 2·5	61	+ 11	63	+11	557	+121	46	+ 10

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather continued fine and dry over the eastern and southern parts of the United Kingdom, but was rather unsettled in the west and north, the amount of rainfall being, upon the whole, the largest recorded for several weeks past. Thunderstorms occurred in many parts of Great Britain on the 20th, and at some of our south-western stations on the 21st or 22nd.

Temperature was above the mean in all districts, the excess being slight (3° to 4°) in Scotland, but very large (7° to 9°) over the greater part of England and Ireland. The highest readings were observed mostly on the 19th or 20th, but at some of the western stations they occurred later in the week, the thermometer exceeding 70° in all districts excepting Scotland N., and exceeding 80°, over a considerable portion of England. At Cambridge, the maximum on the 20th was as high as 84°. The lowest readings were registered mainly at the beginning of the period, when the thermometer fell below 40° in all districts excepting Ireland S., and below the freezing point in many parts of Great Britain, the lowest reading of all being 26° at Lairg and Cirencester. At the inland stations the diurnal range was again very large.

Rainfall was less than the mean in all the Wheat producing districts, as well as in England S.W. and the Channel Islands. In England N.W. the average amount was just reached, while in Ireland and the west of Scotland there was a slight excess.

Bright Sunshine was, upon the whole, less prevalent than for some weeks past, the aggregate amount in Ireland and Scotland being below the average. In the eastern, central, and southern parts of England, however, there was again a large excess. The percentage of the possible duration ranged from 24 in Scotland E., to 57 in England E., 58 in England S., and 63 in the Channel Islands.

Barometer and Wind.—During the week two anticyclonic systems advanced over our Islands from the northward, the first of these appearing on the 16th and 17th, and the other on the 20th and 21st. At the commencement of the time, shallow depressions were observed over various parts of Ireland and England, and on many other occasions low pressure systems have skirted our extreme west and north-west coasts. The prevailing winds have been mostly Easterly or South-Easterly, but at times there has been considerable variability, especially over the northern parts of the United Kingdom.

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II.—DATA from which the SUMMARY on page 91 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°				Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	54	28	48·0	36·6	42·0	+ 0·3	17	15	4	0·31	−0·17	*	*	*	*
	Stornoway	64	30	52·4	37·7	44·7	+ 1·2	37	12	4	0·30	−0·29	32·9	− 5·1	32	− 5
	Wick	68	31	55·7	37·7	46·3	+ 3·1	48	12	4	0·20	−0·20	*	*	*	*
	Lairg Ⓢ	69	26	57·6	36·7	46·7	+ 3·7	55	15	3	0·24	−0·27	*	*	*	*
	Glencarron Ⓢ												*	*	*	*
	Fort Augustus Ⓢ	70	32	56·6	40·3	48·1	+ 3·9	50	5	3	0·14	−0·36	17·5	?	17	?
	Fort William Ⓢ	70	33	58·1	42·3	49·8	+ 4·1	55	0	4	0·50	−0·30	27·9	?	28	?
1. SCOTLAND, E.	Nairn	66	30	56·3	39·6	47·6	+ 2·9	49	7	3	0·12	−0·17	*	*	*	*
	Aberdeen	64	35	51·6	40·9	46·0	+ 1·9	33	3	4	0·40	−0·10	22·2	−11·8	22	−12
	Braemar Ⓢ	69	30	53·2	36·5	44·5	+ 3·0	41	15	3	0·46	−0·09	23·3†	?†	23†	?†
	Ochtertyre Ⓢ	73	34	56·4	38·6	47·1	+ 3·2	50	10	4	0·41	−0·14	*	*	*	*
	Leith	60	35	52·7	40·4	46·3	+ 1·0	37	4	5	0·62	+0·22	*	*	*	*
	Marchmont Ⓢ	69	32	53·6	39·1	46·0	+ 2·7	40	8	4	0·54	−0.02	25·0	?	25	?
2. ENGLAND, N.E.	Alnwick Castle	60	35	52·3	41·4	46·6	+ 3·7	35	2	5	0·33	−0·22	*	*	*	*
	Durham	72	35	57·9	39·6	48·3	+ 4·1	54	7	5	0·26	−0·23	19·1	− 7·9	19	− 9
	Shields	56	36	49·7	40·4	44·8	+ 0·5	26	4	3	0·22	−0·18	*	*	*	*
	Scarborough Ⓜ	64	36	53·4	40·7	46·8	+ 1·7	39	4	2	0·43	−0·02	*	*	*	*
	York	74	36	62·6	41·4	51·5	+ 5·5	59	2	2	0·30	−0·13	38·7	+ 7·2	39	+ 7
	Spurn Head	55	38	50·9	42·1	46·3	+ 1·5	30	0	2	0·13	−0·20	*	*	*	*
3. ENGLAND, E.	Hillington Ⓜ	77	32	67·1	41·4	53·6	+ 7·2	84	2	2	0·10	−0·32	54·5	+18·0	56	+19
	Yarmouth	57	39	51·9	42·3	46·9	+ 1·8	34	0	1	0·08	−0·33	*	*	*	*
	Geldeston	70	35	61·1	37·9	48·9	+ 2·9	66	11	1	0·07	−0·33	60·1	+20·6	61	+20
	Cambridge	84	36	72·0	41·3	55·9	+ 9·0	100	2	2	0·12	−0·27	57·3	+21·3	58	+21
	Rothamsted	77	31	68·5	40·6	53·9	+ 8·1	89	4	2	0·13	−0·39	53·1	?	54	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	78	35	68·0	38·7	52·6	+ 6·1	88	9	2	0·27	−0·13	*	*	*	*
	Loughborough	81	38	69·1	41·6	54·7	+ 7·5	91	1	2	0.25	−0·18	*	*	*	*
	Stamford (Ketton Hall)	80	31	68·7	40·7	54·0	+ 6·6	89	4	3	0·41	−0·02	*	*	*	*
	Cheadle Ⓜ	74	38	64·9	44·1	54·0	+ 9·1	84	0	2	0·36	−0·14	*	*	*	*
	Churchstoke Ⓜ	76	35	66·4	42·7	54·0	+ 9·3	84	0	2	0·16	−0·26	45·8	+12·6	47	+13
	Hereford Ⓜ	79	39	68·6	45·3	56·4	+ 9·7	101	0	2	0·14	−0·29	*	*	*	*
	Cirencester	80	26	69·1	42·6	55·2	+ 9·5	92	0	1	0·04	−0·48	51·8	+17·1	53	+17
	Oxford	80	37	68·9	44·1	55·9	+ 9·1	97	0	2	0·05	−0·39	50·6	+16·4	52	+17
5. ENGLAND, S.	London	82	37	69·6	44·6	56·5	+ 8·2	102	0	3	0·08	−0·37	46·3†	+15·7†	47†	+16†
	North Foreland	61	40	54·9	44·3	49·4	+ 3·3	52	0	0	—	?	*	*	*	*
	Strathfield Turgiss Ⓜ	82	29	72·7	38·4	54·7	+ 7·5	104	10	0	—	−0·42	*	*	*	*
	Dungeness	66	40	57·9	46·1	51·7	+ 4·9	68	0	1	0·01	−0·39	*	*	*	*
	Hastings (St. Leonards)	72	40	63·7	48·1	55·5	+ 7·6	95	0	1	0·02	−0·43	60·9	+20·9	63	+22
	Southampton	76	37	68·5	47·6	57·6	+ 9·5	109	0	1	0·04	−0·47	50·3	+11·4	52	+12
	Hurst Castle	71	40	64·3	48·9	56·2	+ 9·3	99	0	0	—	−0·43	*	*	*	*
	Stowell Ⓜ	77	36	68·7	47·0	57·3	+ 10·6	107	0	2	0·03	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	72	37	59·0	43·9	51·1	+ 5·2	64	0	3	0·36	−0·52	*	*	*	*
	Glasgow	69	35	56·3	42·4	49·0	+ 4·0	49	0	4	0·59	+0·09	29·8	+ 2·1	30	− 1
	Ardrossan	65	35	55·7	42·0	48·5	+ 2·3	46	0	4	0·87	+0·36	*	*	*	*
	Glenlee Ⓢ	73	37	59·7	40·9	49·9	+ 4·6	60	3	4	1·06	+0·41	*	*	*	*
	Douglas (Isle of Man)	67	41	59·0	45·1	51·7	+ 5·9	68	0	4	1·17	+0·63	39·1	− 4·8	40	− 5
7. ENGLAND, N.W.	Newton Reigny	72	35	60·9	41·1	50·5	+ 6·6	63	3	2	0·29	−0·16	37·7	+ 3·0	38	+ 3
	Stonyhurst	68	38	60·8	44·4	52·2	+ 6·5	71	0	4	0·35	−0·20	33·6	− 0·3	34	0
	Blackpool Ⓜ	72	39	63·6	45·7	54·2	+ 7·8	85	0	3	0·33	−0·06	34·0	− 2·0	34	− 1
	Manchester	75	33	64·8	45·2	54·5	+ 8·8	88	0	2	0·42	−0·04	*	*	*	*
	Liverpool Obsy. (Bidston)	75	40	64·3	46·3	54·9	+ 8·0	90	0	2	0·47	+0·10	*	*	*	*
	Llandudno Ⓜ	78	45	65·0	48·3	56·3	+ 9·0	100	0	2	0·53	+0·10	37·1	+ 2·9	38	+ 3
	Holyhead	75	45	62·7	48·0	55·0	+ 7·9	91	0	3	0·67	+0·24	*	*	*	*
8. ENGLAND, S.W.	Llandovery	82	33	72·1	44·9	57·9	+ 12.2	111	0	2	0·09	−0·55	*	*	*	*
	Pembroke	70	46	61·0	49·0	54·7	+ 8·1	89	0	3	0·25	−0·20	42·1	− 2·7	43	− 2
	Arlington (N. Devon)	76	37	67·6	46·4	56·5	+ 11·0	102	0	1	0·09	−0·58	*	*	*	*
	Cullompton Ⓜ	77	36	69·5	44·3	56·3	+ 9·6	100	0	1	0·04	−0·59	47·9	+13·2	49	+14
	Falmouth	67	42	59·9	48·2	53·8	+ 6·0	83	0	0	—	−0·70	41·6	− 0·1	43	0
	Plymouth	73	36	63·0	47·1	54·7	+ 5·8	89	0	2	0·61	+0·07	49·2	+ 8·6	51	+ 9
	Prawle Point	69	39	60·4	48·6	54·2	+ 7·5	85	0	1	0·70	+0·22	*	*	*	*
9. IRELAND, N.	Malin Head	66	43	56·9	47·1	51·8	+ 5·3	69	0	3	0·56	?	*	*	*	*
	Londonderry	73	41	62·9	47·3	54·7	+ 7·5	89	0	3	0·45	−0·07	*	*	*	*
	Edenfel (Omagh)	70	39	60·9	44·9	52·5	+ 6·8	74	0	3	1·22	+0·74	*	*	*	*
	Mullaghmore												*	*	*	*
	Belmullet	71	46	60·1	49·6	54·6	+ 6·1	88	0	6	1·05	?	27·5	− 9·1	28	− 9
	Markree Castle	70	38	62·6	47·9	54·9	+ 8·7	90	0	5	0·94	+0·36	*	*	*	*
	Brookeborough	71	37	62·0	45·4	53·3	+ 8·1	79	0	3	0·58	+0·00	30·8	− 3·2	31	− 3
	Armagh	66	41	60·8	45·1	52·6	+ 6·9	74	0	5	0·74	+0·24	*	*	*	*
	Donaghadee	61	40	56·3	45·7	50·8	+ 5·0	62	0	4	0·96	+0·49	*	*	*	*
	Edgeworthstown												*	*	*	*
10. IRELAND, S.	Dublin	67	46	61·7	49·5	55·3	+ 8·0	93	0	5	0·76	+0·29	35·6	− 4·3	36	− 4
	Parsonstown	73	42	64·6	48·1	56·0	+ 9·4	98	0	3	0·60	+0·13	24·9	−13·1	25	−15
	Kilkenny	72	44	63·0	47·6	54·9	+ 8·0	90	0	4	0·63	+0·13	*	*	*	*
	Waterford												*	*	*	*
	Roche's Point	62	49	56·4	49·6	52·8	+ 4·5	76	0	3	1·32	+0·55	*	*	*	*
	Valencia	69	50	62·6	51·9	57·0	+ 8·3	105	0	5	0·60	−0·30	18·1	−23·2	18	−23
	Killarney	68	50	61·7	51·0	56·1	+ 7·9	99	0	5	0·64	?	*	*	*	*
	Foynes	71	48	63·2	51·4	57·0	+ 9·4	105	0	3	0·59	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	61	45	57·4	49·3	53·2	+ 4·4	78	0	1	0·10	−0·43	*	*	*	*
	Jersey	77	39	69·1	49·1	58·6	+ 9·3	116	0	1	0·33	−0·16	56·1	+10·8	58	+11

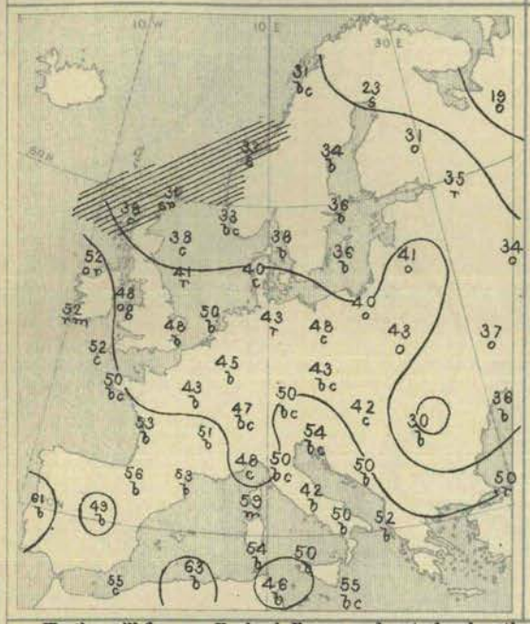
Stations marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

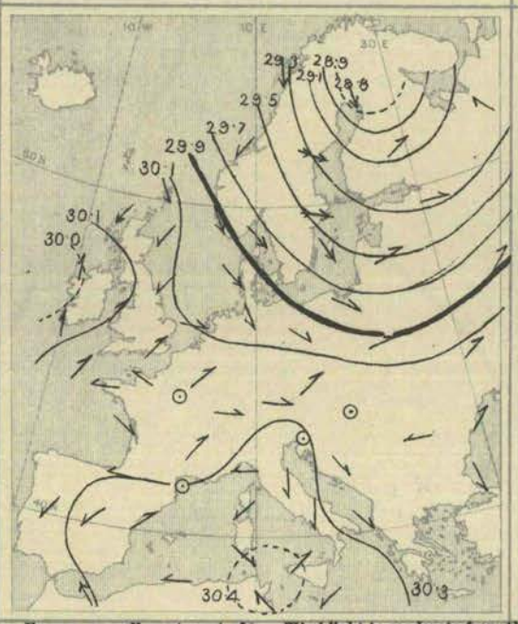
* An asterisk is inserted in all places for which the information is not usually received.

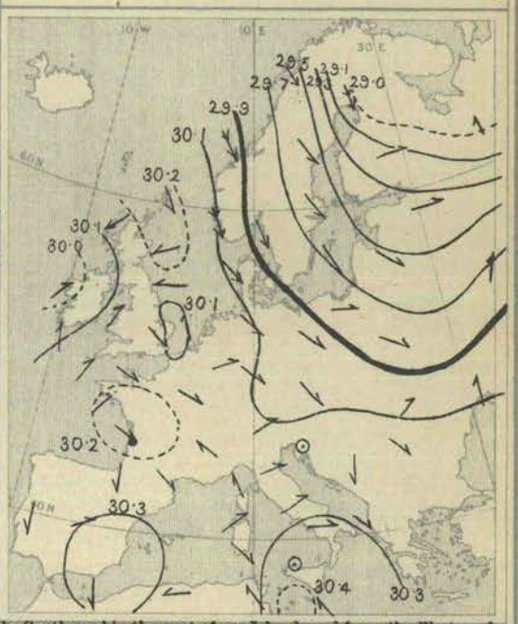
† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

Sunday, 16th April.

Temperature and Weather.	Barometer and Wind.	
8 a.m.	8 a.m.	6 p.m.







Weather still fine over England, France, and central and southern Europe, as well as at most of the Scandinavian stations. Dull in Ireland and Scotland, with rain in many places; cloudy and unsettled also over the northern parts of Russia and Germany, with rain at St. Petersburg and Cuxhaven. Snow falling at Christiansund. Dull, rainy weather spreading southwards later over the central and south-eastern parts of England; snow and sleet falling in Northumberland; conditions remaining fair in the extreme south, but solar halos reported at many stations. Rain falling later over Germany and the Netherlands.

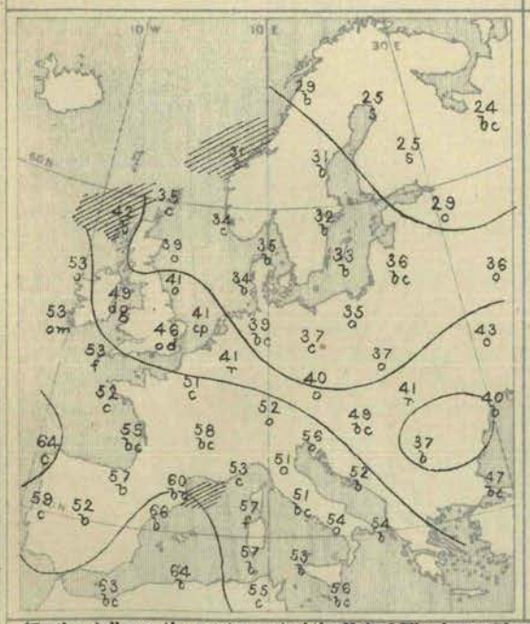
Temperature fallen decidedly in Scandinavia, Denmark, and Scotland, but risen elsewhere Morning readings highest, 68° at Barcelona, 63° at Algiers, 61° at Lisbon, and 59° at Sanguinaire, above 50° at the Mediterranean stations generally, as well as in Ireland and the south-west of England. Lowest, 19° at Archangel, 23° at Haparanda, and 27° at Uleaborg; below 40° over nearly the whole of Russia and Scandinavia and also in Scotland. Daily maxima very little above 40° at any of our northern stations, but thermometer rising to between 62° and 67° over central England, and to 70° or more in many parts of France and Spain.

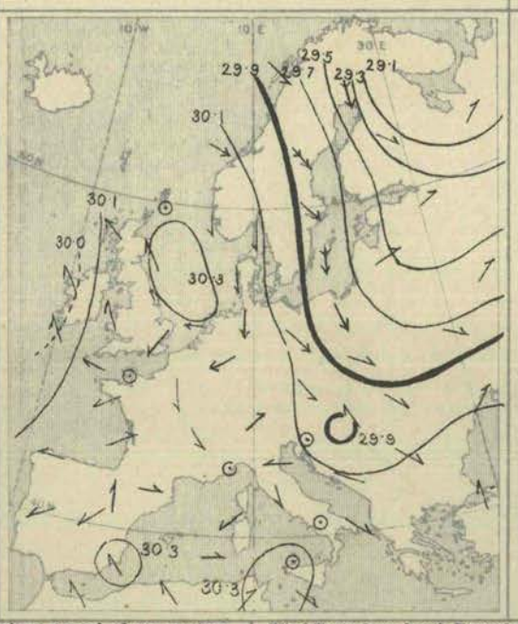
Wind light to moderate from the Southward in the west of our Islands and from the Westward in the east and south, but North-Easterly or Northerly on our northern coasts. Strong to a gale from the North-Westward or Westward over Scandinavia and the Baltic, light from the Westward or South-Westward over Russia and Germany. Variable in France, Northerly or North-Westerly in Italy; North-Easterly in Spain, and Easterly or South-Easterly in Algeria. No important change occurring over western Europe during day, but gales subsiding in Sweden

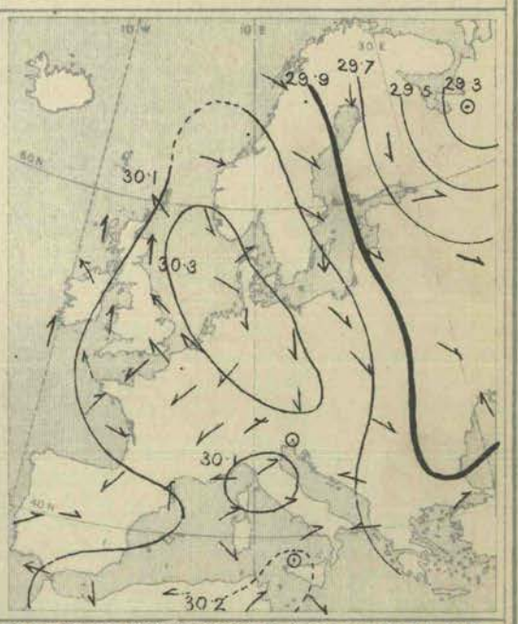
Barometer highest, 30·3 ins. to 30·4 ins. over the greater part of Spain, Italy, and the Mediterranean; 30·2 ins. and upwards over all the more southern parts of Europe, and 30·1 ins. and upwards in a ridge extending northwards over Great Britain. Lowest, 28·8 ins. and less in a depression lying over Lapland (gradients steep over Scandinavia and northern Russia); 30·0 ins. and less in a shallow depression off the north-west of Ireland. Large depression in far north subsequently travelling eastwards; new anticyclonic system appearing off the north and north-east of Scotland. Shallow disturbance forming over the east of England in evening.

Monday, 17th April.

Temperature and Weather.	Barometer and Wind.	
8 a.m.	8 a.m.	6 p.m.







Weather dull over the greater part of the United Kingdom, with rain at several of our western and southern stations, and with fog at the mouth of the Channel. Dull also in many parts of Russia and Germany, with snow in Finland, and with rain at Lemberg. Fine and bright over Scandinavia, Denmark, France, and the greater part of southern Europe. Weather improving later in the south-east of our Islands, but rain falling in the west and north—heavily at Roche's Point.

Temperature fallen over England and the greater part of northern and central Europe, but risen elsewhere. Morning readings highest, 66° at Barcelona, 64° at Corunna and Algiers, 63° at Oran, and 59° at Lisbon; above 55° at several of the Mediterranean stations, and above 50° in the extreme west and south of our Islands. Lowest, 24° at Archangel, 25° at Uleaborg and Kuopio, and 27° at Haparanda, below the freezing point in most parts of Scandinavia and northern Russia, and below 40° in Scotland. Remaining below 50° all day at most of our own northern and eastern stations, but rising to between 55° and 60° in the south-west, exceeding 70° in many parts of southern Europe, and reaching 80° at Perpignan.

Wind Easterly or South-Easterly in our Islands, light or moderate in force generally, but fresh or strong on our extreme north and north-west coasts. Strong from the Northward or North-Westward in Scandinavia, with gales in Sweden, moderate or fresh from the same quarter over Denmark, Finland, the Baltic, and the greater part of Germany, light from the South-Westward over the southern parts of Russia. Light and variable over France and Italy, Easterly or North-Easterly in Spain, South-Easterly in Algeria. Subsequently veering to the Southward on many parts of our western and northern coasts. Gales in Sweden subsiding quickly.

Barometer highest, 30·3 ins. and upwards over the North Sea, and also over Sicily and Tunis, 30·2 ins. and upwards in a large anticyclone covering nearly the whole of western and southern Europe. Lowest, 29·1 ins. and less in a large depression lying over the north of Russia, 30·0 ins. and less in a shallow disturbance lying off the west of Ireland. Russian depression subsequently travelling away to the eastward; low pressure system off west of Ireland spreading over our western and northern coasts and occasioning general fall of barometer in our Islands.

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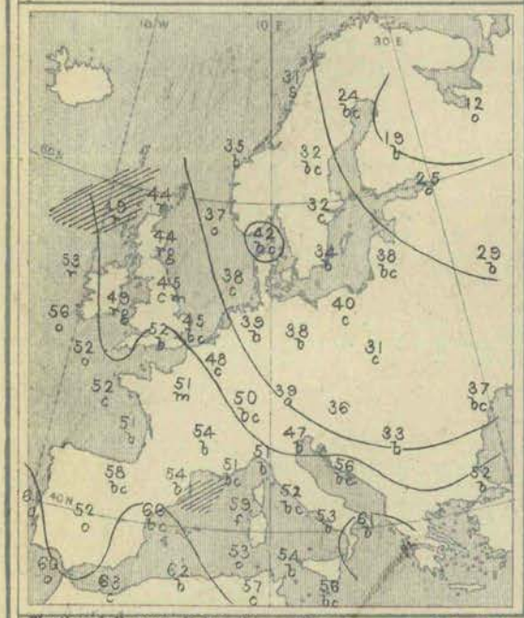
Tuesday, 18th April.

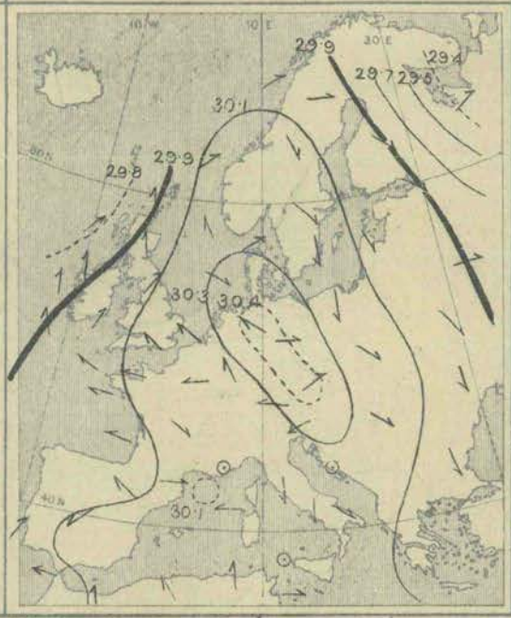
Temperature and Weather. — 8 a.m.

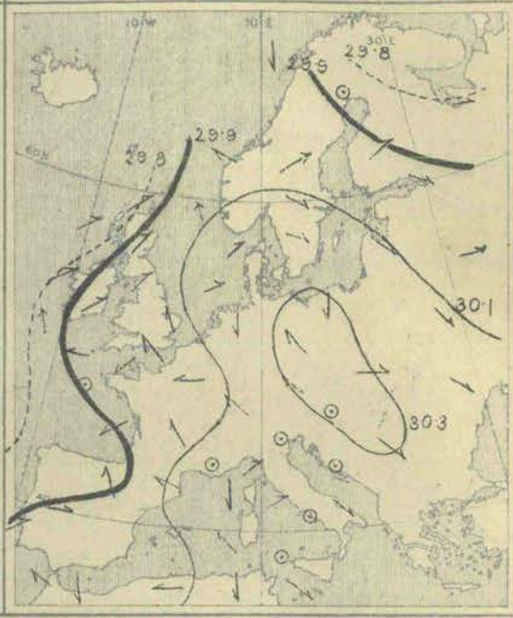


Weather dull over all but the south-eastern parts of the United Kingdom, with rain in many parts of Scotland, north Wales, and central Ireland. Fine in the south-east of England, as well as at most of the Continental stations, but dull over the Spanish Peninsula, and also in the west of Norway, with snow at Bodö. A little rain falling during day in most of our own northern and north-western districts, but weather remaining fair and dry in all other parts of western and southern Europe. Solar halos observed in the south of England in afternoon.

Temperature risen over our Islands, Scandinavia, and Denmark, but fallen elsewhere. Morning readings highest, 66° at Barcelona, 63° at Oran, 62° at Algiers, and 61° at Lisbon and Brindisi; above 50° on many parts of our own western and southern coasts, and as high as 56° at Valencia (Ireland) and Jersey. Lowest, 12° at Archangel, 18° at Uleaborg, 19° at Kuopio, and 24° at Haparanda, below the freezing point over the northern parts of Russia and Scandinavia generally, and below 40° over central and eastern Europe. Rising during day to between 65° and 70° over central England, exceeding 80° at some of the western and southern French stations, and reaching 86° at Biarritz.

Barometer and Wind. — 8 a.m. and 6 p.m.



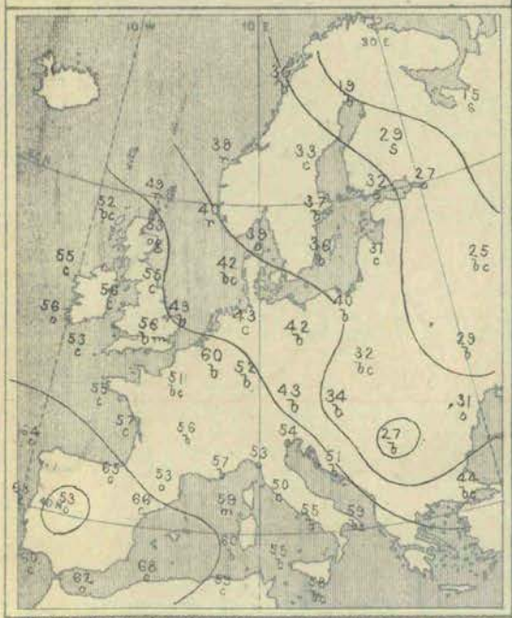


Wind light or moderate from the Eastward or South-Eastward over England, France, and the Netherlands, but Southerly or South-Westerly over the northern and north-western parts of our Islands and the west of Norway, with a gale in the Hebrides. Light or moderate from the Northward or North-Westward over Sweden, Russia, Austria, and Italy. Rather variable over Spain and the south of France, South-Easterly in Algeria. No important change occurring during day.

Barometer highest, 30·4 ins. and upwards over Germany, 30·1 ins. and upwards in a large anticyclone covering nearly the whole of central and southern Europe and extending northwards over Scandinavia. Lowest, 29·4 ins. and less in a well-marked depression lying over the north of Russia, 29·8 ins. and less in two shallower disturbances—one lying over the south of Russia and the other off the north-west of Scotland. No important change occurring during day, but barometer falling slowly in most parts of western and central Europe, and anticyclone becoming somewhat reduced both in size and height.

Wednesday, 19th April.

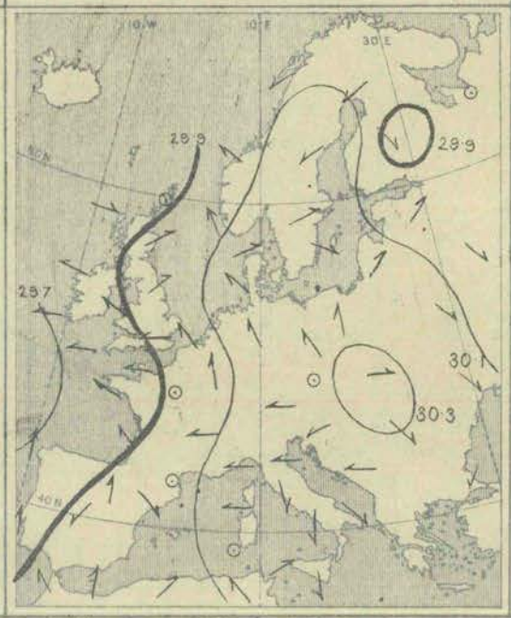
Temperature and Weather. — 8 a.m.

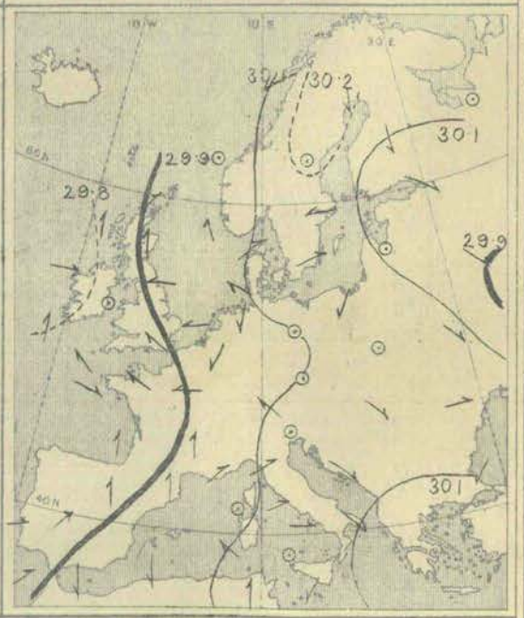


Weather in morning cloudy in many parts of the United Kingdom, but fine at most of the southern stations, as well as over France and nearly the whole of central, southern, and eastern Europe. Rainy in the west of Norway; dull, with snow, in the north of Russia, cloudy in Spain and Algeria. A little rain falling later over Scotland and the north of Ireland, with a thunderstorm at Stornoway: no important change occurring elsewhere.

Temperature risen in all but the south-eastern countries of Europe. Morning readings highest, 68° at Algiers, 66° at Barcelona, 65° at Biarritz, and 64° at Corunna; above 55° at the Mediterranean stations generally, as well as in the southern parts of the United Kingdom. Lowest, 15° at Archangel, 19° at Haparanda, 22° at Uleaborg, and 25° at Moscow; below the freezing point at most of the Russian and Austrian stations, and below 40° in Norway. Rising during day to 70° or more in many parts of England, Ireland, and France, reaching 78° at Cambridge, Paris, and Perpignan, and 81° at Biarritz. Daily maxima below 70° at most of the Italian stations.

Barometer and Wind. — 8 a.m. and 6 p.m.





Wind light to moderate from the Eastward or South-Eastward over England, Ireland, France, Germany, the Netherlands, and eastern shores of the North Sea, but South-Westerly over the northern parts of Scotland. North-Easterly in the north of Sweden, but South-Westerly or Westerly over the Baltic and the Gulf of Finland. North-Westerly or Northerly over the southern parts of Russia and Italy; South-Easterly or Southerly in Spain and Algeria. Subsequently backing to the Southward in the north of Scotland: no important change occurring elsewhere.

Barometer highest, 30·3 ins. and upwards over Poland and the eastern parts of Austria; 30·1 ins. and upwards in a large anticyclone covering a considerable part of central and southern Europe and extending northwards over Scandinavia. Lowest, 29·7 ins. and less in a large shallow depression lying to the south-westward of our Islands; 29·9 ins. and less in other systems lying respectively over Finland and over the south of Russia. Small secondary disturbances beginning to form later over the Channel and north of France; but barometer rising in the west of our Islands. Russian depression moving away to the eastward.

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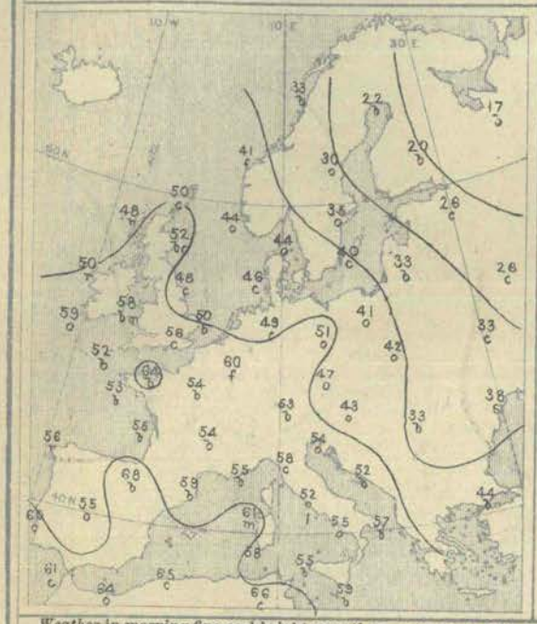
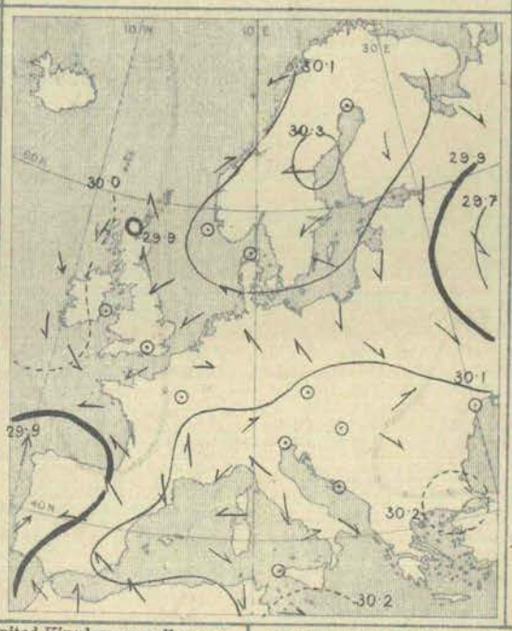
Thursday, 20th April.

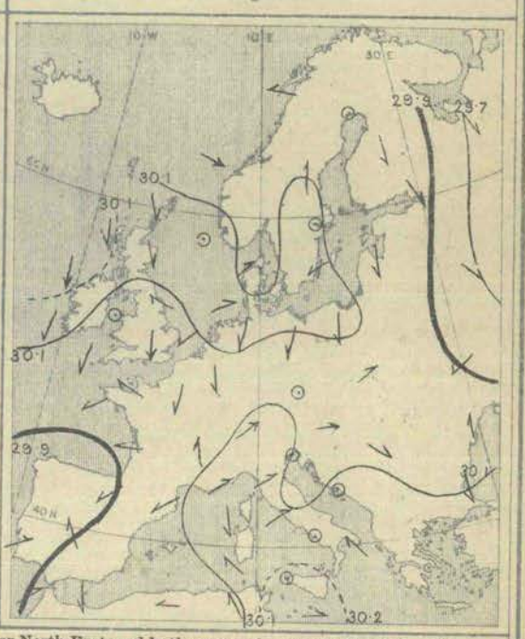
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over the greater part of the United Kingdom, as well as over the Netherlands, France, northern Italy, western Germany, and northern Russia. Thunder showers in London in early morning. Dull in the extreme west and north of our Islands, with rain at Stornoway and Belmullet, cloudy or overcast at most of the Scandinavian stations, as well as in Spain and Italy, with rain at Corunna. A little rain falling during day in Scotland and the west of Ireland, and large quantities in the west of Norway, snow reported in the south of Sweden. Further thunder showers experienced in London in afternoon.

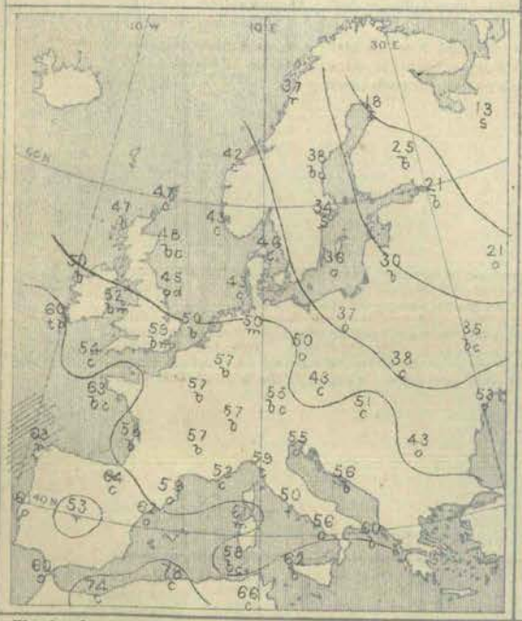
Temperature in morning reading highest, 68° at Biarritz, 66° at La Calle, 65° at Algiers, and 64° at Nemours and Oran; above 55° in several parts of the United Kingdom, and as high as 62° at Prawle Point and 60° at Liverpool. Lowest, 13° at Uleaborg, 17° at Archangel, 20° at Kuopio, and 22° at Haparanda; below the freezing point at many of the Russian and Swedish stations. Daily maxima over England exceptionally high for the time of year, thermometer exceeding 80° at many of the inland stations and reaching 84° at Cambridge. Readings scarcely so high over France generally, but thermometer rising to 82° at Paris and 88° at Biarritz.

Wind light from the Eastward or North-Eastward in the east and south of England, and from the Eastward or South-Eastward in the west of France, rather variable in the west of our Islands, but chiefly Northerly or North-Westerly. Light from the Northward or North-Eastward over Finland, Sweden, and the Baltic, but North-Westerly over the central and southern parts of Russia. Light and very variable over Germany, Austria, and Italy; South-Easterly or Southerly in Spain and Algeria. Northerly winds setting in later over a considerable portion of our Islands, and North-Easterly breezes in the west of France.

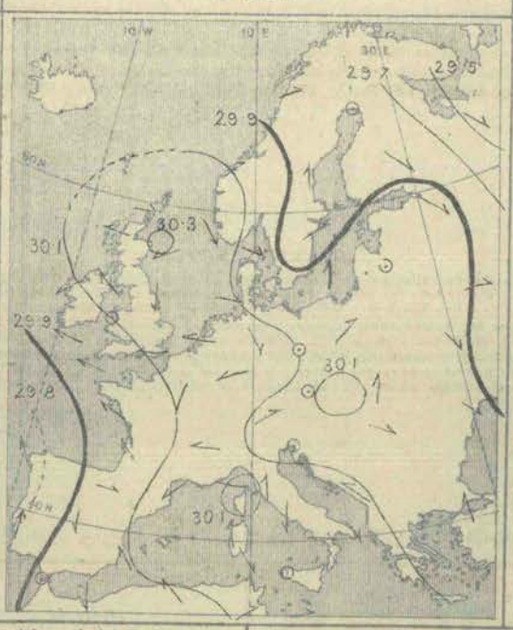
Barometer highest, 30·1 ins. to 30·3 ins. in an anticyclone lying over Scandinavia, Denmark, and Finland; 30·1 ins. to 30·2 ins. in another system covering the greater part of southern and eastern Europe; 30·1 ins. and upwards in a third area spreading over our western coasts from the Atlantic. Lowest, 29·7 ins. and less in a depression over central Russia, 29·8 ins. and less in a shallow system lying off the Portuguese coasts. Anticyclone over the west of our Islands subsequently spreading eastwards over nearly the whole Kingdom. High-pressure system over Scandinavia gradually breaking up.

Friday, 21st April.

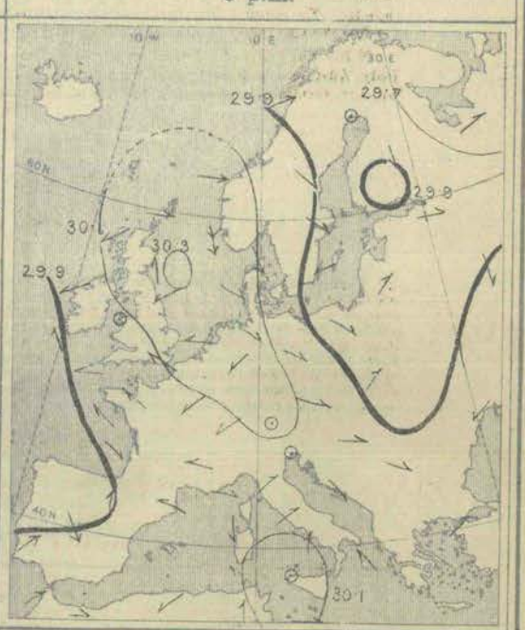
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fine over the greater part of our Islands, France, Italy, Austria, and the Netherlands, but thunder showers reported at Valencia (Ireland), cloudy in most parts of northern and eastern Europe, with rain at Bodö, and with snow at Stockholm and Archangel; dull also in Spain, with rain at Corunna and Madrid. No important change occurring later, but thunderstorms reported at night at Roche's Point, Scilly, and Biarritz.

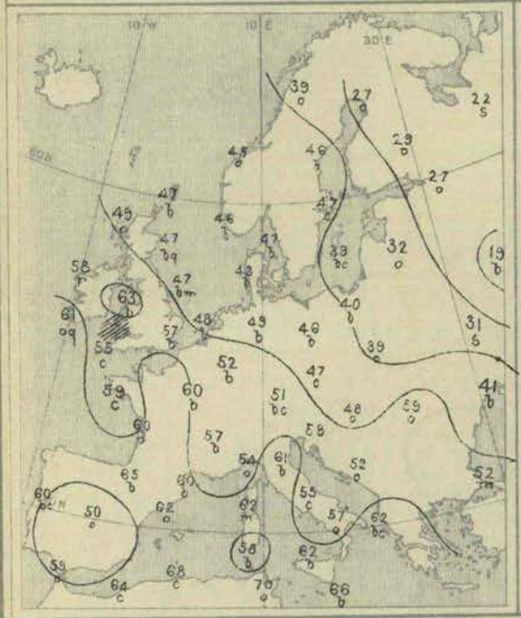
Temperature fallen in the northern parts of our Islands, as well as at many of the Russian stations, but risen elsewhere. Morning readings highest, (1) 78° at Algiers, 74° at Oran, and 66° at La Calle; (2) 67° at Jersey, 63° at Brest, and 61° at Prawle Point; above 55° over the southern parts of our Islands generally. Lowest, 13° at Archangel, 18° at Uleaborg, and 21° at Haparanda, St. Petersburg, and Moscow; below the freezing point over Russia generally. Rising later to 75° or more over the inland parts of England and France, and reaching 82° at Cambridge and Paris, and 88° at Limoges; remaining below 55° on the north and north-east coasts of Great Britain, and not exceeding 47° at Shields.

Wind Easterly over our Islands, the Netherlands, and the north of France; light in force generally, but fresh on our extreme south-western coasts. Moderate from the South-Eastward in the west of France, fresh or strong from the Southward on the western coasts of the Spanish Peninsula. North-Westerly on the eastern shores of the North Sea, but South-Westerly in the west of Norway and Southerly in Sweden: Northerly or North-Westerly in Russia; variable over Germany, Austria, Italy, and Algeria. No important change occurring during day.

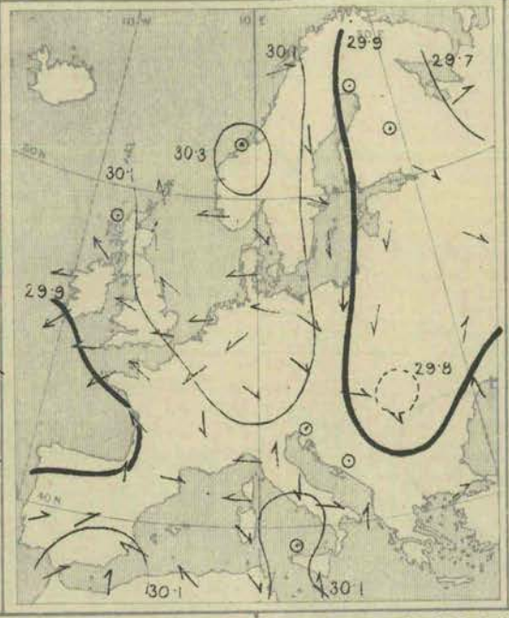
Barometer highest, 30·2 ins. and upwards over the northern parts of our Islands and the North Sea, 30·1 ins. and upwards in an anticyclone extending northward from the Mediterranean across the south and east of France, western Germany, and the Netherlands, to Great Britain, the north of Ireland, and the west of Norway. Lowest, 29·5 ins. and less in a depression over northern Russia; 29·8 ins. and less in another disturbance lying off the Portuguese coasts. Fall taking place in most parts of western Europe during day, and anticyclone moving slowly eastwards; no decided change occurring elsewhere.

Saturday, 22nd April.

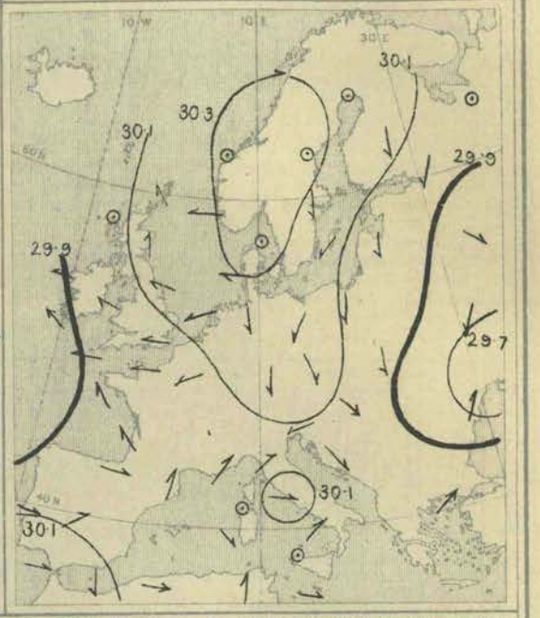
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fine and bright over the greater part of our Islands and the Continent, but dull in the west of Ireland, with rain at Belmullet. Dull also in the west of Norway, the south of France, and at most of the Russian stations, with snow at Archangel and Kiev. Showers falling later in the south-west of our Islands, and a thunderstorm, with heavy rain (0·7 in.), occurring at Prawle Point. Rain also falling in the south of Russia and some parts of Spain, but weather remaining fine and dry over Europe generally.

Temperature changed very irregularly. Morning readings highest, 75° at La Calle, 68° at Algiers, 66° at Malta, and 65° at Biarritz, slightly above 60° at some of our own western and southern stations, as well as over central France. Lowest, 19° at Moscow, 22° at Archangel, 27° at Haparanda and St. Petersburg, and 29° at Kharkov; below the freezing point over Russia generally. Rising during day to 70° or more in several parts of England, France, Spain, and Italy; highest maxima in our Islands, 75° at Holyhead, and 74° at Cambridge; highest Continental readings, 86° at Limoges, 84° at Clermont, and 82° at Paris and Lyons.

Wind Easterly (North-Easterly to South-Easterly) over our Islands, the Netherlands, and the greater part of France; light or moderate in force generally, but fresh or strong on our south-west coasts. North-Westerly or Northerly over Sweden, Germany, Austria, and the northern and central parts of Russia; variable in Italy; South-Westerly or Westerly in Spain, South-Easterly in Algeria. No important change occurring during day.

Barometer highest, 30·3 ins. and upwards in the west of Norway; 30·1 ins. and upwards in an anticyclone covering the greater part of Scandinavia, Denmark, Germany, and the northern and eastern parts of Great Britain, as well as in smaller areas lying over Spain and the Mediterranean. Lowest, 29·7 ins. and less in the north of Russia; 29·8 ins. and less in a depression over Austria; 29·9 ins. and less in a large shallow area lying over the Bay of Biscay and the extreme south-west of Ireland. Austrian depression subsequently moving eastwards; disturbance over Bay of Biscay spreading northwards over our western coasts.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are show by arrows, which are drawn flying *with the wind*, the force is indicated thus : ⟫⟶ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breese: and ⊙ = a calm. In the left-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds: o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Germany, Sweden, and Norway, and 7 a.m. in France, Algeria, Italy, Austria, and Russia; that for 6 p.m. is prepared from observations made at 6 p.m. in the British Islands and France, 7 p.m. in Algeria, 8 p.m. in Sweden and Norway, Germany, and Austria, and 9 p.m. in Russia, Belgium, and Italy. The time indicated in each case is the standard time for each country.

GENERAL NOTES.

During this period anticyclonic conditions have again prevailed over a considerable portion of Europe, the only depression of any note being observed on the 16th, when a large and rather deep cyclonic system travelled eastwards over the northern parts of Scandinavia and Russia. In the rear of this disturbance an anticyclone appeared over the north of our Islands and spread southwards over the North Sea, the system gradually increasing in size until it embraced the greater part of western, central, and southern Europe. Depressions now began to skirt the Irish and Scotch coasts and occasioned unsettled weather in the west and north of our Islands generally, with increasing Southerly and South-Westerly winds in the Hebrides. On the 20th, however, these disturbances passed away and a new anticyclone advanced over the northern parts of our Islands from the Atlantic, the system ultimately spreading in the same manner as its predecessor, over the greater part of the Continent. Towards the close of the week shallow depressions appeared off our south-west coasts, and Easterly or South-Easterly winds set in over the whole of the United Kingdom. Excepting in the extreme north-western, northern, and eastern parts of Europe, where the conditions were rather unsettled, fair dry weather prevailed throughout the entire week, with unusually high temperatures over England and France.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 92.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	24·9	?	25	?	EASTBOURNE	58·0	?	60	?
OSWALDKIRK (Yorkshire)	35·8	?	36	?	TENBY	50·6*	?	52*	?
WORKSOP	44·7	+14·4	46	+15	NEWQUAY	44·3	?	46	?
THURCASTON (Leicestershire)	53·7	+25·4	55	+26	TORQUAY	50·4*	?	52*	?
MARGATE	55·9	?	58	?	ARLEY COTTAGE (County Cavan)	29·4	?	30	?
WESTBOURNE (Sussex)	61·0*	?	63*	?	GUERNSEY	65·4*	?	67*	?
BRIGHTON	59·7	?	62	?					

* The values at Westbourne, Tenby, Torquay and Guernsey are obtained by Jordan's Photographic Recorder.

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WEEKLY WEATHER REPORT.

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VOL. X. No. 17.] *Third Series.* WEEK ENDING SATURDAY, 29TH APRIL, 1893. [*Price 6d.* [*Annual Subscription post paid, £1 10s. 0d*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871-90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the twenty-five years 1866-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the ten years 1881-90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

	DISTRICTS. (See p. 98.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 1st, 1893. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	76	34	57·6	41·2	49·0	5 above.	52	+24	2	−12	330*	+154	480*	−33
	1. SCOTLAND, EAST	74	31	59·9	39·5	49·2	4 above.	61	+24	7	− 4	388	+133	542	− 7
	2. ENGLAND, N.E.	78	33	57·0	40·0	48·1	3 above.	51	+18	6	− 1	399	+160	434	−52
	3. ENGLAND, EAST	82	33	64·7	40·2	51·9	5 above.	77	+31	5	− 4	538	+228	524	−21
	4. MIDLAND COUNTIES	78	33	68·5	40·6	53·9	7 above.	89	+41	4	− 5	623	+289	501	−35
	5. ENGLAND, SOUTH	80	32	66·0	44·3	54·6	6 above.	88	+36	0	− 5	585	+223	371	−40
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	75	32	61·9	42·6	51·8	5 above.	69	+29	0	− 8	443	+183	354	−50
	7. ENGLAND, N.W.	74	34	62·3	44·5	53·0	6 above.	77	+34	0	− 7	506	+242	323	−84
	8. ENGLAND, S.W.	81	31	65·7	46·2	55·5	7 above.	95	+48	0	− 4	632	+259	246	−66
	9. IRELAND, NORTH	74	35	59·2	44·3	51·4	4 above.	66	+22	0	− 7	507	+167	258	−95
	10. IRELAND, SOUTH	72	33	62·1	46·7	54·0	5 above.	84	+36	0	− 5	642*	+200	178	−96
	—CHANNEL ISLANDS	74	46	62·2	50·3	55·9	6 above.	97	+47	0	0	757	+310	70	−52

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 98.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the mean for the Week.	From Jan. 1st, 1893. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 1st, 1893. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in	10ths of in.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	3	5	1 less.	78*	− 3	14·9*	− 1·5	46	+ 11	44	+11	320	0	25	0
	1. SCOTLAND, EAST	3	2	3 less.	62	− 3	7·0	− 2·5	50	+ 12	49	+13	408	+ 47	32	+ 3
	2. ENGLAND, N.E.	2	1	4 less.	50	−12	5·0	− 2·3	59	+ 25	58	+26	466	+157	37	+ 13
	3. ENGLAND, EAST	1	less than ½	4 less.	53	− 8	5·2	− 1·9	72	+ 31	71	+31	542	+165	42	+ 13
	4. MIDLAND COUNTIES	1	less than ½	4 less.	51	− 7	5·1	− 3·1	67	+ 32	66	+32	522	+189	41	+ 15
	5. ENGLAND, SOUTH	1	less than ½	4 less.	50	− 7	6·0	− 2·4	71	+ 34	71	+32	554	+204	43	+ 16
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	2	4	2 less.	64	− 5	11·3	− 5·3	65	+ 25	63	+23	444	+107	35	+ 8
	7. ENGLAND, N.W.	1	1	4 less.	53	−11	6·9	− 2·9	53	+ 18	51	+17	445	+119	35	+ 9
	8. ENGLAND, S.W.	1	less than ½	6 less.	51	−14	9·1	− 3·7	74	+ 51	73	+31	583	+173	45	+ 13
	9. IRELAND, NORTH	2	2	3 less.	66	− 7	9·0	− 2·0	51	+ 14	50	+13	378	+ 39	30	+ 3
	10. IRELAND, SOUTH	1	1	5 less.	57	−11	9·7	− 3·3	58	+ 16	57	+15	447	+ 44	35	+ 4
	—CHANNEL ISLANDS	0	—	5 less.	58	−14	7·6	− 3·0	80	+ 37	81	+37	637	+157	49	+ 12

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather was again fine, dry, and warm over England and the greater part of Ireland, but in Scotland the conditions, after being fine during the earlier days of the period, became unsettled towards its close, and falls of rain and hail set in; in the extreme north some snow showers were experienced. By the end of the week the unsettled weather was extending gradually to England and Ireland, and slight rain had occurred at nearly all stations.

Temperature continued above the mean in all districts, the excess varying from 3° to 5° in the north and west, to 6° or 7° in most parts of England. The highest of the maxima were registered on the 24th or 25th, when the thermometer rose to 82° in England E., 81° in England S.W., 80° in England S., and to between 72° and 78° in the other districts. Towards the end of the week the maxima were much lower, the thermometer in many places failing to reach 60° in the warmest part of the day. The lowest of the minima occurred on the 28th over England, on the 29th in Scotland, and on irregular dates in Ireland, and ranged from 31° in Scotland E. and England S.W., and 32° in England S. and Scotland W., to 38° in Ireland S., and to 46° in the Midland Counties.

Rainfall was less than the mean in all districts: over England the fall was scarcely appreciable, and in Ireland the amount was only one to two tenths of an inch, while in Scotland the fall was larger—varying between two and five tenths.

Bright Sunshine was very prevalent over the entire Kingdom and greatly exceeded the mean. The percentage of the possible duration ranged from 44 to 63 in Scotland, from 50 to 57 in Ireland, and from 51 to 73 over England. In the Channel Islands the percentage was as high as 81.

Barometer and Wind.—During the greater part of the period the distribution of pressure over our Islands was anticyclonic, and the winds were light from between North and East. As the week drew to a close, however, the anticyclone moved southwards, the wind backed to the Westward, and shallow depressions began to appear over our northern districts.

* This value has been altered owing to the receipt of further information.

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II.—DATA from which the SUMMARY on page 97 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°				Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	54	39	51·4	41·9	46·4	+ 3·8	31	0	4	0·30	−0·13	*	*	*	*
	Stornoway	67	38	56·3	41·7	48·7	+ 4·1	48	1	3	0·28	−0·29	51·3	+11·1	49	+11
	Wick	61	35	56·1	40·7	48·0	+ 4·0	47	4	4	0·62	+0·20	*	*	*	*
	Lairg (S)	73	34	60·7	38·7	49·2	+ 5·0	64	9	4	0·23	−0·27	*	*	*	*
	Glencarron (S)	76	35	59·1	41·7	50·0	+ 5·6	57	1	3	1·23	+0·25	*	*	*	*
	Fort Augustus (S)	73	38	60·4	40·3	49·9	+ 5·0	62	5	3	0·20	−0·30	39·0	?	38	?
	Fort William (S)	69	40	59·0	43·6	50·9	+ 4·4	62	0	3	0·68	−0·11	?47·2	?	?45	?
1. SCOTLAND, E.	Nairn	70	34	61·6	39·1	49·8	+ 4·1	67	8	3	0·25	−0 05	*	*	*	*
	Aberdeen	62	38	56·0	41·7	48·5	+ 3·3	47	1	4	0·27	−0·23	48·9	+12·5	47	+12
	Braemar (S)	71	31	59·7	36·8	47·7	+ 5·0	62	15	2	0·23	−0·31	43·3†	?†	42†	?†
	Ochtertyre (S)	74	34	65·6	39·1	51·7	+ 6·8	80	8	1	0·01	−0·54	*	*	*	*
	Leith	61	39	56·4	40·1	48·0	+ 1·6	50	5	2	0·16	−0·24	*	*	*	*
	Marchmont (S)	67	35	59·9	40·1	49·5	+ 5·0	60	5	3	0·29	−0.26	59·8	?	58	?
2. ENGLAND, N.E.	Alnwick Castle	56	35	53·1	40·9	46·7	+ 2·8	38	3	2	0·07	−0·48	*	*	*	*
	Durham	67	33	59·7	38·0	48·3	+ 3·2	61	11	2	0·08	−0·40	46·2	+16·2	45	+15
	Shields	57	36	54·0	39·7	46·5	+ 1·3	41	6	2	0·06	−0·34	*	*	*	*
	Scarborough (M)	58	40	54·3	40·0	46·8	+ 0·6	42	6	2	0·16	−0·26	*	*	*	*
	York	78	34	68·0	39·1	52·9	+ 5·8	88	8	2	0·06	−0·38	67·7	+33·3	66	+33
	Spurn Head	56	41	52·7	42·4	47·3	+ 1·4	37	0	0	—	−0·32	*	*	*	*
3. ENGLAND, E.	Hillington (M)	76	39	66·5	41·2	53·2	+ 5·8	82	2	1	0·01	−0·41	71·7	+31·7	70	+30
	Yarmouth	56	40	53·1	44·1	48·4	+ 2·1	45	0	0	—	−0·42	*	*	*	*
	Geldeston	69	34	61·5	38·9	49·7	+ 2·5	67	9	0	—	−0·41	70·6	+27·6	70	+27
	Cambridge	82	35	73·6	37·9	54·9	+ 6·5	108	11	1	0·01	−0·39	71·8	+33·8	71	+33
	Rothamsted	76	33	69·0	39·0	53·3	+ 6·3	92	8	1	0·08	−0·45	73·5	?	73	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	78	34	69·9	38·7	53·6	+ 5·9	95	9	1	0·01	−0·41	*	*	*	*
	Loughborough	78	34	71·0	37·9	53·7	+ 5·2	99	11	1	0.08	−0·38	*	*	*	*
	Stamford (Ketton Hall)	77	34	70·1	39·4	54·0	+ 5·3	95	7	1	0 02	−0·43	*	*	*	*
	Cheadle (M)	75	39	66·2	41·8	53·4	+ 7·2	81	1	1	0·12	−0·39	*	*	*	*
	Churchstoke (M)	72	33	65·9	39·9	52·3	+ 6·6	81	6	1	0·01	−0·41	61·9	+26·4	62	+26
	Hereford (M)	74	36	67·5	42·5	54·4	+ 6·7	87	0	1	0·01	−0·44	*	*	*	*
	Cirencester	75	35	67·7	43·0	54·8	+ 8·0	90	0	0	—	−0·52	75·4	+37·9	75	+37
	Oxford	78	39	70·0	41·6	55·1	+ 7·0	93	1	1	0·01	−0·43	70·5	+33·7	70	+34
5. ENGLAND, S.	London	78	43	69·9	44·7	56·7	+ 7·0	103	0	1	0·02	−0·43	65·3†	+31·9†	65†	+32†
	North Foreland	60	42	55·3	45·3	50·1	+ 2·5	57	0	0	—	?	*	*	*	*
	Strathfield Turgiss (M)	78	32	71·2	38·5	54·1	+ 5·5	99	10	1	0·03	−0·39	*	*	*	*
	Dungeness	64	39	58·9	45·7	52·0	+ 3·9	70	0	0	—	−0·40	*	*	*	*
	Hastings (St. Leonards)	74	41	66·0	46·4	55·7	+ 6·7	96	0	0	—	−0·42	77·9	+34·9	78	+35
	Southampton	80	41	72·9	44·5	58·0	+ 8·5	112	0	1	0·03	−0·49	69·6	+28·6	70	+29
	Hurst Castle	74	41	65·6	45·9	55·3	+ 7·0	93	0	0	—	−0·43	*	*	*	*
	Stowell (M)	77	38	67·8	43·1	54·9	+ 7·2	90	0	2	0·11	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	70	39	59·4	44·6	51·6	+ 4·7	67	0	3	0·42	−0·42	*	*	*	*
	Glasgow	70	41	60·9	42·3	51·2	+ 5·0	64	0	2	0·30	−0·20	61·4	+27·4	60	+23
	Ardrossan	71	41	61·4	42·7	51·6	+ 4·0	67	0	2	0·79	+0·27	*	*	*	*
	Glenlee (S)	75	32	66·6	39·1	52·2	+ 6·7	84	8	3	0·20	−0·45	*	*	*	*
	Douglas (Isle of Man)	66	41	61·2	44·1	52·2	+ 5·4	71	0	1	0·10	−0·42	68·1	+21·6	66	+20
7. ENGLAND, N.W.	Newton Reigny	74	34	65·5	40·3	52·3	+ 7·5	79	5	1	0·03	−0·42	59·8	+22·1	58	+22
	Stonyhurst	70	40	63·0	42·9	52·5	+ 5·5	74	0	2	0·21	−0·34	53·1	+16·1	52	+16
	Blackpool (M)	71	42	62·0	45·0	53·1	+ 5·5	78	0	1	0·04	−0·34	55·7	+16·3	54	+16
	Manchester	72	40	65·7	43·9	54·5	+ 7·6	88	0	2	0·10	−0·37	41·3†	?	41†	?
	Liverpool Obsy. (Bidston)	72	43	63·0	45·7	53·9	+ 5·9	83	0	0	—	−0·38	*	*	*	*
	Llandudno (M)	68	46	60·8	47·1	53·4	+ 5·1	80	0	2	0·19	−0·25	52·5	+14·8	51	+13
	Holyhead	64	45	56·3	46·6	51·2	+ 3·0	64	0	2	0·11	−0·32	*	*	*	*
8. ENGLAND, S.W.	Llandovery	81	31	72·9	40·9	56·1	+ 9.1	103	3	0	—	−0·64	*	*	*	*
	Pembroke	68	44	59·4	47·3	53·1	+ 5·5	78	0	1	0·03	−0·42	71·2	+24·4	70	+24
	Arlington (N. Devon)	75	39	66·4	45·7	55·6	+ 8·9	95	0	1	0·06	−0·61	*	*	*	*
	Cullompton (M)	77	39	69·4	42·1	55·1	+ 7·2	92	0	1	0·08	−0·53	67·2	+30·8	67	+30
	Falmouth	69	46	63·2	49·4	56·0	+ 7·0	98	0	1	0·02	−0·67	78·6	+34·8	79	+35
	Plymouth	73	44	65·3	47·4	55·9	+ 5·8	97	0	0	—	−0·52	73·6	+31·1	74	+31
	Prawle Point	68	45	63·1	50·3	56·4	+ 8·6	101	0	1	0·01	−0·44	*	*	*	*
9. IRELAND, N.	Malin Head	65	43	55·6	47·4	51·3	+ 3·5	65	0	2	0·26	?	*	*		*
	Londonderry	74	42	62·0	45·4	53·3	+ 5·0	79	0	3	0·45	−0·06	*	*	*	*
	Edenfel (Omagh)	69	40	59·6	43·7	51·3	+ 4·6	65	0	3	0·30	−0·18	*	*	*	*
	Belmullet	63	44	55·9	47·7	51·6	+ 2·1	67	0	3	0·31	?	*	*	*	*
	Markree Castle	63	35	58·0	41·6	49·4	+ 2·0	53	1	2	0·22	−0·33	47·3	+ 8·3	46	+ 7
	Brookeborough	71	38	61·3	41·7	51·0	+ 4·8	64	1	2	0·23	−0·35	*	*	*	*
	Armagh	67	39	61·2	42·4	51·4	+ 4·5	66	0	2	0·07	−0·43	56·0	+19·0	54	+18
	Donaghadee	62	43	57·4	46·3	51·6	+ 4·7	67	0	1	0·14	−0·34	*	*	*	*
	Edgeworthstown	70	39	61·9	42·4	51·7	+ 5·0	68	0	2	0·12	−0·40	*	*	*	*
10. IRELAND, S.	Dub in	66	44	60·9	47·4	53·8	+ 5·3	83	0	1	0·15	−0·32	60·4	+17·7	59	+17
	Parsonstown	68	39	62·9	44·0	53·0	+ 5·3	77	0	2	0·09	−0·39	52 8	+12·8	52	+12
	Kilkenny	69	38	63·4	46·0	54·3	+ 6·4	86	0	1	0·02	−0·48	*	*	*	*
	Waterford	70	38	64·6	45·7	54·7	+ 5·7	89	0	0	—	−0·57	*	*	*	*
	Roche's Point	72	45	61·6	49·1	55·1	+ 5·5	92	0	1	0·15	−0·60	*	*	*	*
	Valencia	66	46	60·9	48·9	54·7	+ 5·1	89	0	1	0·06	−0·33	59·3	+15·7	59	+16
	Killarney	68	38	61·1	45·4	52·9	+ 4·0	76	0	2	0·17	?	*	*	*	*
	Foynes	68	44	61·3	46·9	53·8	+ 5·0	83	0	2	0·20	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	66	48	59·3	50·4	54·6	+ 4·9	88	0	0	—	−0·50	*	*	*	*
	Jersey	74	46	65·0	50·1	57·2	+ 6·9	106	0	0	—	−0·48	84·6	+36·6	85	+37

Stations marked (M) are in connection with the Royal Meteorological Society, and those marked (S) with the Scottish Meteorological Society.

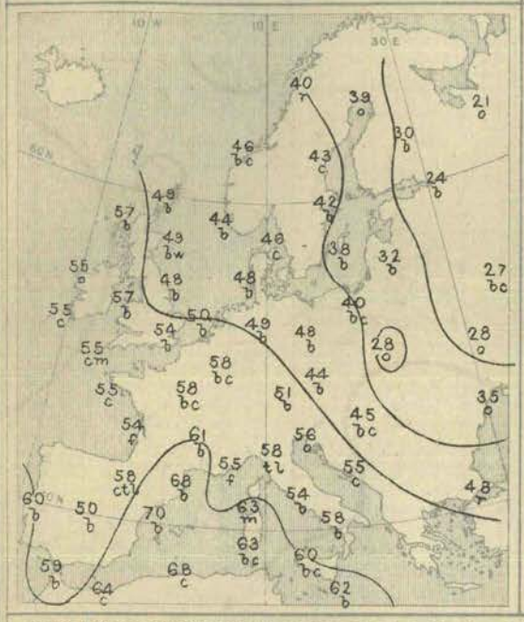
* An asterisk is inserted in all places for which the information is not usually received.

† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row), at the Kew Observatory, and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

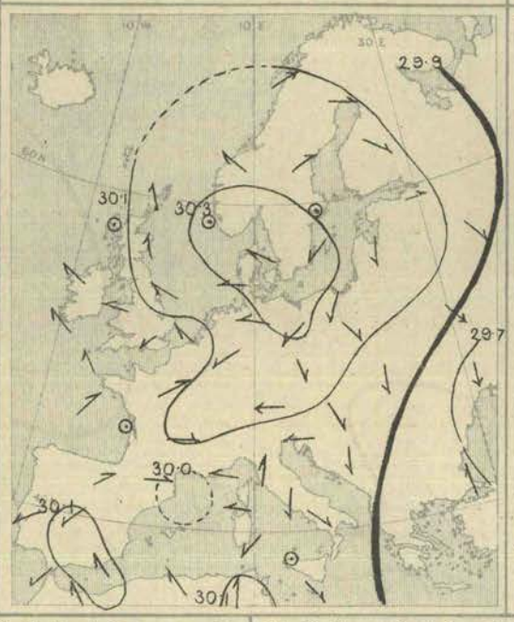
NOTE.—The reports from Mullaghmore have now ceased.

Sunday, 23rd April.

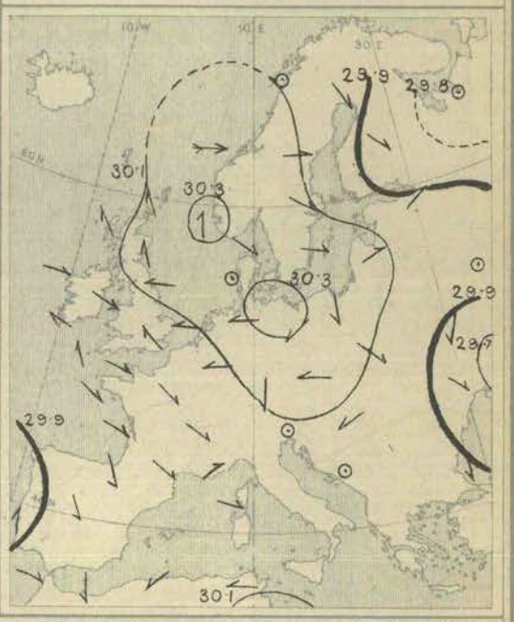
Temperature and Weather. — 8 a.m.



Barometer and Wind. — 8 a.m.



Barometer and Wind. — 6 p.m.



Weather fine and bright over the greater part of our Islands and the Continent, foggy on several parts of our south-west coasts, and dull at some of the Irish stations, with rain at Parsonstown, thunderstorm reported at Biarritz; dull in Poland and the south of Russia, with rain at Cracow, snow at Nicolaieff. A little rain during day in Sweden, as well as at Neufahrwasser, and in the south of France, and a larger quantity at Lisbon, but weather very dry over western Europe generally.

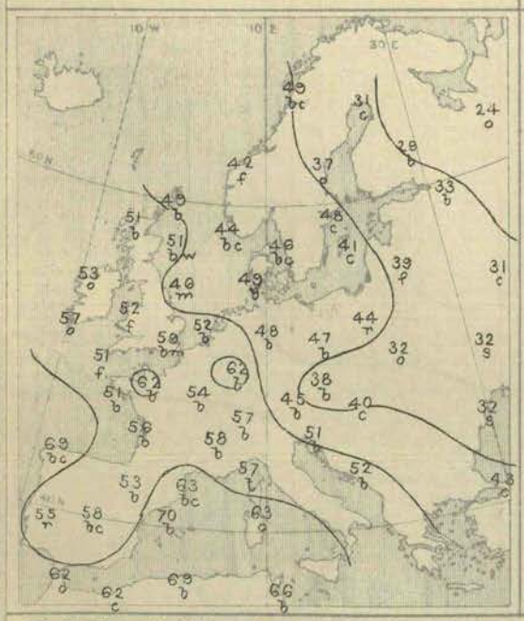
Temperature changed rather irregularly, but fallen a little in most places. Morning readings highest, 70° at Barcelona, 68° at Perpignan, Algiers, and La Calle, and 64° at Oran; above 60° at most of the Mediterranean stations, and above 55° on some parts of our own western coasts. Lowest, 21° at Archangel, 24° at St. Petersburg, 27° at Moscow, and 28° at Uleaborg and Kiev: below 40° over Russia generally. Rising during day to 70° or more in many parts of Great Britain and France, and reaching 79° at Cambridge, 81° at Belfort, and 82° at Perpignan, and 86° to 90° at several Algerian stations. Not touching 70° over Italy.

Wind light or moderate from the North-East in Germany, and from the East or South-East over Denmark, the North Sea, and the greater part of the United Kingdom, Southerly to South-Westerly in west of France. South-Westerly or Westerly in the north of Scandinavia, moderate to strong from North or North-West over Russia and Austria. Variable in France and Italy, North-Easterly in Spain, South-Easterly or Southerly in Algeria. Subsequently becoming rather variable on our own western coasts and Westerly over Gulf of Finland; no important change occurring elsewhere.

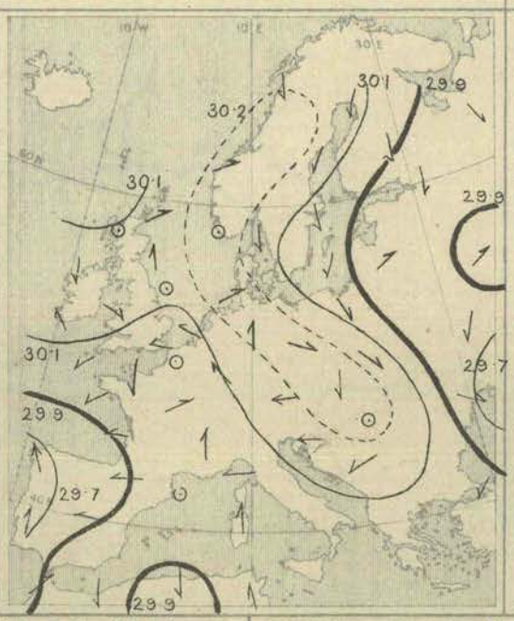
Barometer highest, 30·3 ins. and upwards over Denmark and the south of Scandinavia, 30·1 ins. and upwards in a large anticyclone covering the greater part of northern and central Europe, with the North Sea, Scotland, and the north of England. Lowest, 29·6 ins. and less in a depression over the south of Russia; 29·9 ins. and less (apparently) in a shallow system lying off the south-west of Ireland. No important change occurring over western Europe during day, but a decided fall observed over Finland and the north of Russia.

Monday, 24th April.

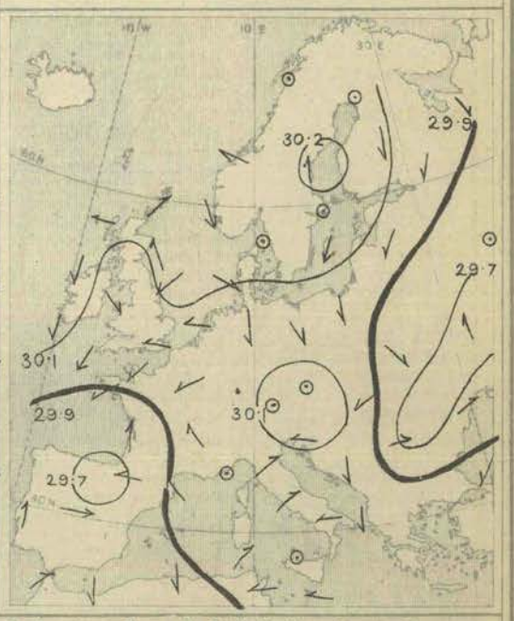
Temperature and Weather. — 8 a.m.



Barometer and Wind. — 8 a.m.



Barometer and Wind. — 6 p.m.



Weather fine and bright over the greater part of our Islands and the Continent, but foggy at several of our own western and south-western stations. Dull over the southern parts of the Spanish Peninsula, with rain at Lisbon, snow falling in the south of Russia. Remaining fair and dry in most parts of western Europe throughout day, but rain falling over the Iberian Peninsula, a thunderstorm with slight rain occurring at Holyhead, and some snow falling over Russia. Thunder heard at Wick.

Temperature changed irregularly. Morning readings highest, 70° at Barcelona, 69° at Corunna and Algiers, and 66° at Tunis (Italian reports not to hand); above 60° at some of the English Channel stations. Lowest, 24° at Archangel, 29° at Kuopio, 31° at Haparanda and Moscow, and 32° at all stations in the south of Russia. Rising during day to 70° at Nairn, and to 75° and upwards in many parts of England and France, the highest readings of all being 82° at Cambridge, 84° at Biarritz, and 88° at Biskra and Laghouat. Ground frost occurred over central England at night.

Wind light or moderate from the Eastward over France, the Netherlands, and western Germany; rather variable in our Islands, but chiefly Northerly or North-Easterly over England and Ireland, and South-Westerly in Scotland; Northerly or North-Westerly over Sweden, Denmark, Germany, and the greater part of Russia, Southerly or South-Easterly in Spain, and strong in force at Corunna; light and variable in Algeria. No important change occurring over western Europe during day, but Northerly wind on eastern shores of the Baltic falling very light.

Barometer highest, 30·2 ins. and upwards in an anticyclone of irregular form having its central area over Norway, Germany, and the eastern parts of the North Sea, and 30·1 ins. and upwards over a considerable portion of northern and central Europe. Lowest, 29·7 ins. and less in a depression lying off the Portuguese coasts and also in another disturbance over the south of Russia. Former depression subsequently advancing north-eastwards and barometer falling rather decidedly over France, system filling up in night. Disturbance in south of Russia moving northwards and changing in form.

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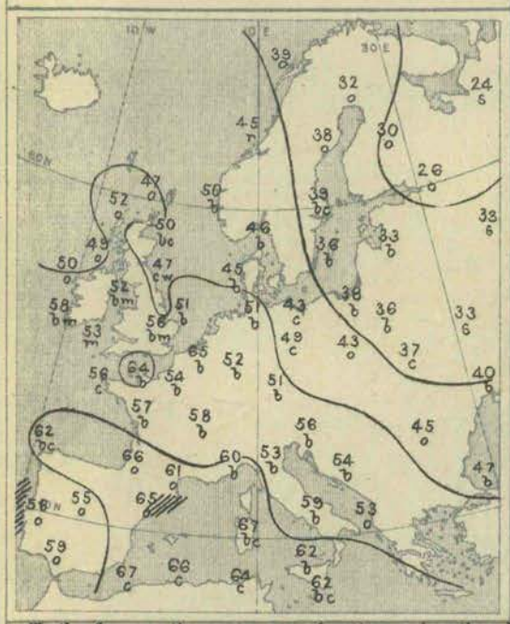
Tuesday, 25th April

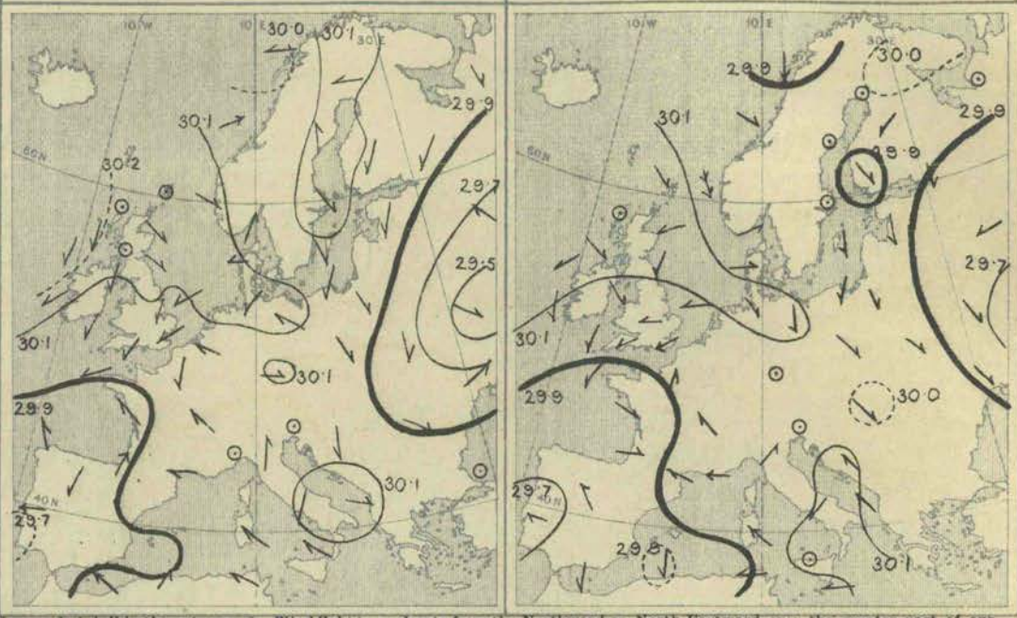
Temperature and Weather. 8 a.m.



Weather fine over the greater part of western and southern Europe, but dull in the extreme north and north-west of our Islands, as well as in Spain and the south of France. Dull also in the north of Scandinavia, and at most of the Russian stations, with rain at Christiansund, and with snow at Moscow and Kiev. Rain falling during day in many parts of Scandinavia. Further falls of rain over Spain and Portugal, a thunderstorm occurring at Biarritz, slight snow showers over Russia. Weather remaining very dry over western Europe generally.

Temperature changed very irregularly. Morning readings highest, 68° at Aumale, 67° at Cagliari, Oran, and Sfax, and 66° at Biarritz and Algiers; above 60° at most of the Mediterranean stations, as well as at Liverpool, Prawle Point, and Jersey. Lowest, 24° at Archangel, 26° St. Petersburg, 30° at Knopio, 31° at Hangö, and 32° at Haparanda; below 40° over Sweden and Russia generally. Rising during day to 75° and upwards in many parts of England and France and Italy, and reaching 81° at Paris, 82° at Cambridge and Brest, and 90° at Biskra and Laghouat, not exceeding 55° on the east coast of England.

Barometer and Wind. 8 a.m. and 6 p.m.

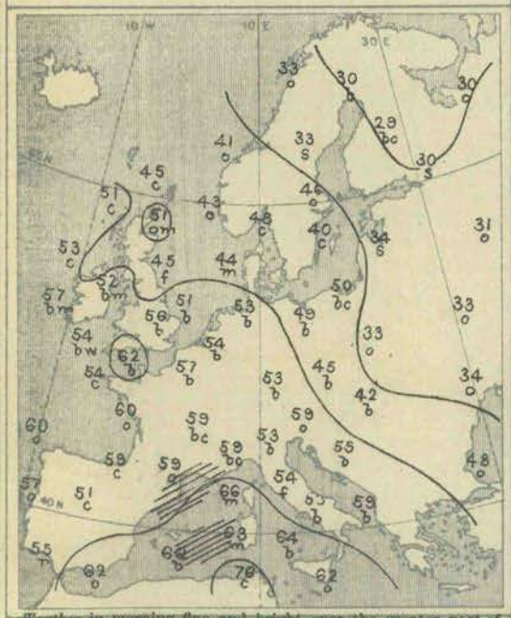


Wind light to moderate from the Northward or North-Eastward over the greater part of our Islands, Easterly in the south-east of England. Variable in Scandinavia, Denmark, Germany, and Italy; Northerly in the western parts of Russia, but South-Westerly or Westerly in the south of that country, with a gale at Nicolaieff. Easterly or South-Easterly in Spain and Algeria. No important change occurring over western Europe during day, beyond a decrease of wind force over southern Russia.

Barometer highest, 30·2 ins. and upwards in a large anticyclone off our north-western coasts, and exceeding 30·1 ins. in a ridge extending thence to the North Sea and north Germany; 30·1 ins. in smaller areas lying respectively over the Gulf of Bothnia and over the southern parts of Italy. Lowest, 29·6 ins. and less in a well-marked depression lying over the southern half of Russia; 29·7 ins. and less in a new shallow disturbance lying off the Portuguese coasts (that noticed over north of Spain yesterday having filled up). No important change occurring over western Europe during day, but Russian depression passing quickly away to the north-eastward.

Wednesday, 26th April

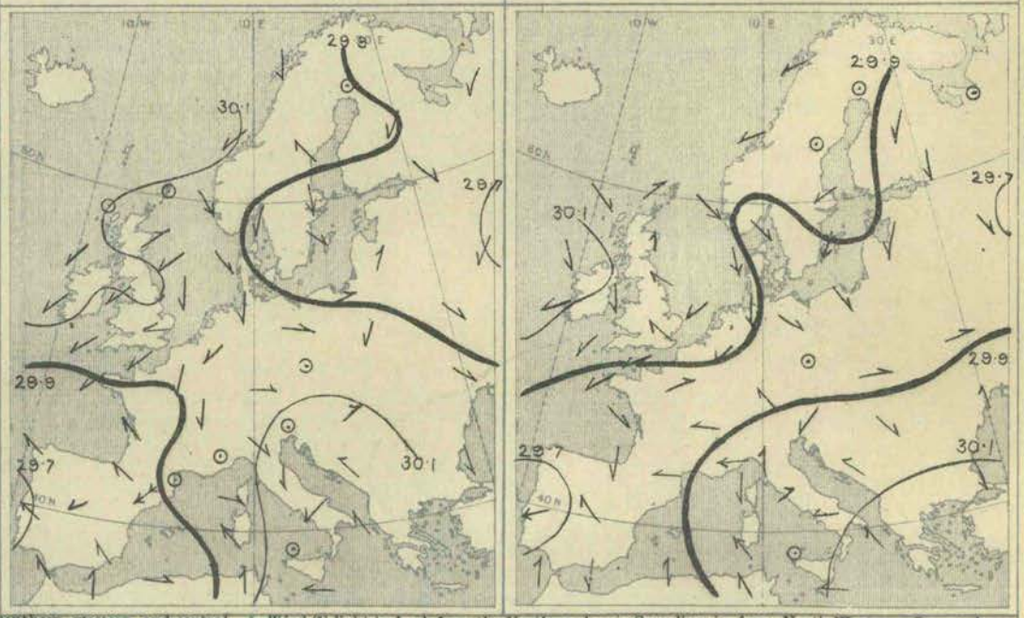
Temperature and Weather. 8 a.m.



Weather in morning fine and bright over the greater part of southern, western, and central Europe, as well as over Finland and some parts of Lapland, dull over Norway and the north of our Islands, dull and unsettled over the Baltic and Russia, with snow at several stations. Some rain at several of the Scotch stations later, and more over the west and south-west of France and the Spanish Peninsula—amounts considerable at Biarritz, Madrid, Lisbon, and San Fernando. Lightning seen at Biarritz.

Temperature fallen somewhat decidedly in many parts of Austria, France, and the northern counties of England. Morning readings highest, 76° at La Calle, exceeding 60° on the southern and western sides of the Mediterranean generally, as well as at some of the English Channel stations. Below 40° over Poland, Russia, and northern Europe, and, lowest of all, 29° at Knopio, 30° at Haparanda, Archangel, and St. Petersburg, 31° at Vardö, Hangö, and Moscow. Rising later to between 68° and 71° over many parts of England, to 75° at Wiesbaden, 79° at Brest, 81° at Paris, and 82° at Belfort, and to between 90° and 97° at several Algerian stations.

Barometer and Wind. 8 a.m. and 6 p.m.



Wind (1) light to fresh from the Northward over Scandinavia, from North-West over Denmark, and from West-South-West over north Germany, light from South-South-West over the Baltic Provinces, and very light and variable (mainly Northerly) over Russia and also over Scotland. Northerly over Ireland and the north of England, North-Easterly over our southern counties and the Channel, Easterly to South-Easterly over the Bay of Biscay and the western parts of the Spanish Peninsula. Not much change later, but sea breezes setting in on the west coast of France.

Barometer highest, 30·1 ins. and more to 30·0 ins. over the United Kingdom, the North Sea, and the west of Norway, as well as over Italy, Sicily, south-eastern and central Europe. Lowest, 29·7 ins. and less in a depression off the west of Portugal, and in another large system over central Russia; 29·8 ins. and less in a shallow secondary disturbance over the Baltic. Falling slightly over our Islands and their neighbourhood later, and depression over the Baltic beginning to fill up.

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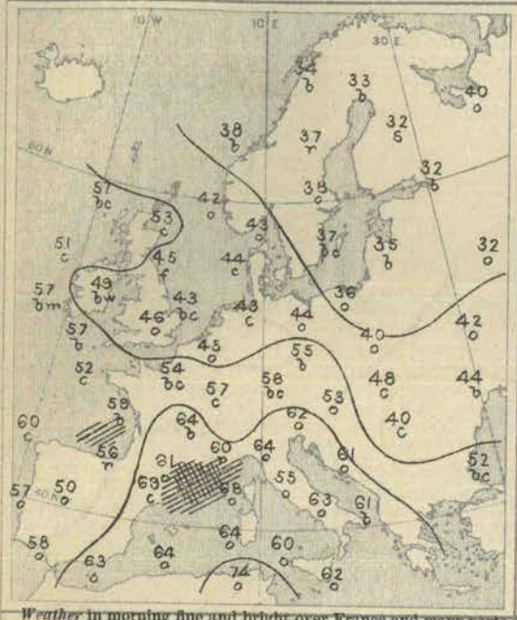
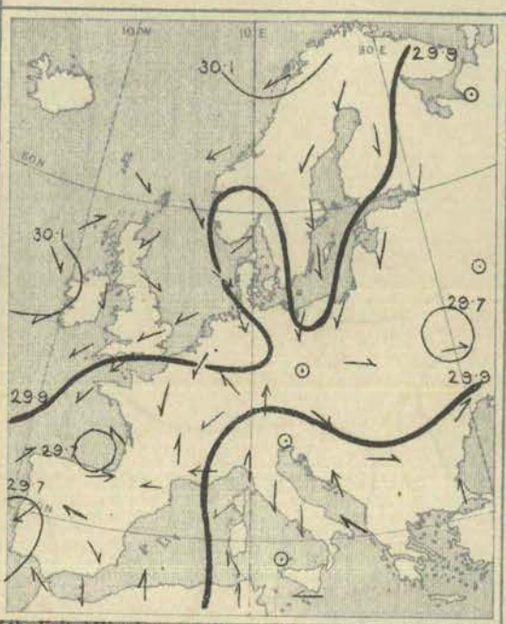
Thursday, 27th April.

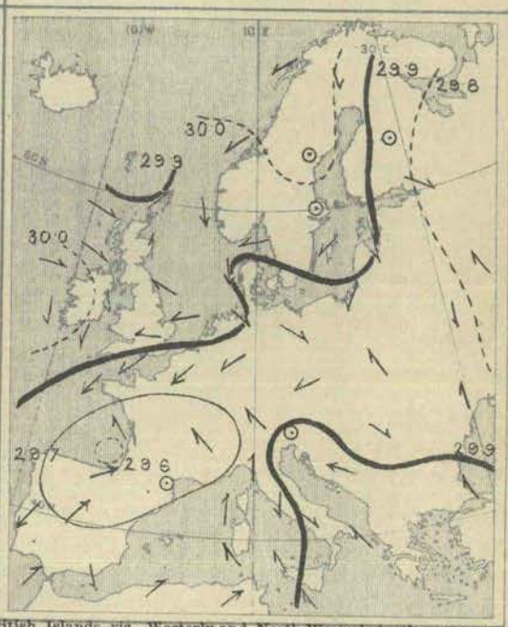
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over France and many parts of the United Kingdom, as well as over Norway, Lapland, and some parts of Russia, cloudy or overcast elsewhere, and changeable in many places—rain falling at Biarritz and Hernösand, snow at Kuopio, fog or haze prevalent in the north-east and east of England. Slight rain later over the northern parts of Great Britain, a large quantity at Faerder, and in Spain, the south-west and south of France, and north of Italy, with thunderstorms in places. Snow at Russian stations.

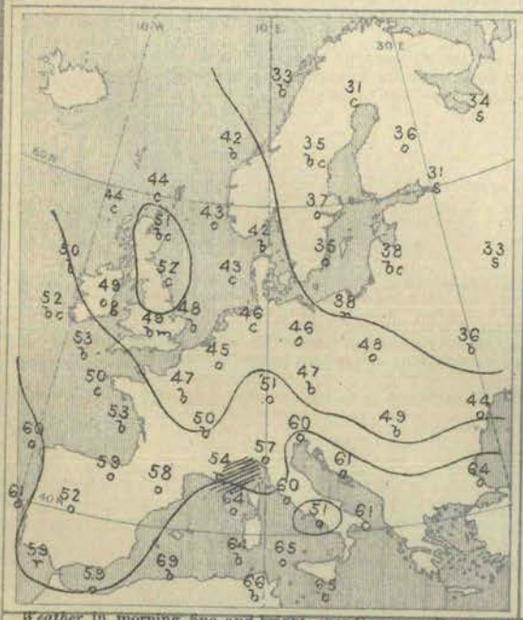
Temperature again fallen over England and the north of France and Germany, risen over southern, south-eastern, and central Europe. Morning readings highest, 74° at La Calle, 70° at Sfax, 60° and more on the Mediterranean and Adriatic coasts as a whole; above 50° on our western and northern coasts. Lowest, 32° at Moscow, St. Petersburg, and Kuopio, 33° at Haparanda and Hangö, and below 40° over northern Europe generally. Rising during day to 70° at Loughborough, Cambridge, Brest, Perpignan, and Wiesbaden, to 71° at Paris, to between 70° and 75° over Italy, and to between 90° and 95° over central Algeria.

Wind anticyclonic over the British Islands, viz., Westerly and North-Westerly in the north, Easterly and North-Easterly in the south; very fresh from East and North-East over the Channel and Brittany, and strong Easterly at Cape Sicié—but West-South-Westerly at Biarritz, and South-South-Westerly at Corunna. Variable and moderate over Italy, very variable in direction and light in force over central and eastern Europe. No general change later.

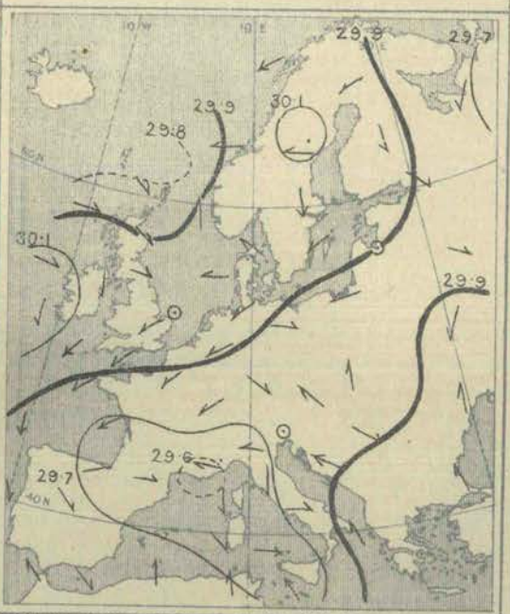
Barometer highest, 30·1 ins. and more to 29·9 ins. over the whole of the British Islands, the North Sea, and the Netherlands, as well as over the northern parts of Scandinavia; 30·0 ins. and more to 29·9 ins. over south-eastern Europe, Italy, and the eastern parts of the Mediterranean generally. Lowest, 29·7 ins. and less in the south of Portugal; 29·7 ins. and less to 29·8 ins. over Russia, and 29·8 ins. and less in a small depression over the Skager Rack and north of Denmark. Gradients slight and very irregular. Falling slightly over the United Kingdom during the day, rising over Poland and Russia.

Friday, 28th April.

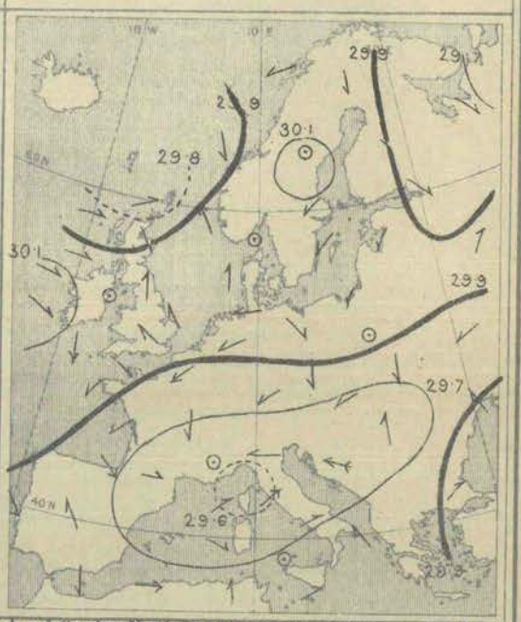
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over Germany, France, and many parts of our Islands, as well as the north-west of Norway, more cloudy than of late in many other districts; rainy at San Fernando, in the south of France, and at Neufahrwasser, snow falling at Moscow, St. Petersburg, Helsingfors, and Archangel. Further considerable falls of rain during day in south, south-east, and south-west of France, and heavy falls in the north of Italy, moderate falls on our north-west coasts, and slight in the north-east of Scotland. Sleet and hail at Wick.

Temperature fallen decidedly over the Mediterranean and France, changed irregularly elsewhere. Morning readings highest, 72° at Sfax; above 60° at many Mediterranean stations, but below 60° at others; above 50° on the Atlantic coasts of France, England, and Ireland. Lowest, 31° to 36° over Lapland and all the northern parts of Russia, and below 40° over the Baltic. Rising during day to between 60° and 68° over many parts of England and the southern parts of France and Germany, to 70° and more over the southern half of Italy, but not touching 80° even over Algeria, and not touching 50° over north Germany.

Wind (1) Northerly over Finland and Sweden, North-Easterly over the southern half of the Baltic, Southerly to Easterly in Norway; (2) Westerly to North-Westerly over the northern parts of the United Kingdom, Northerly to North-Easterly over the southern half and in France; (3) variable and cyclonic, but not strong, over southern Europe and the Mediterranean, variable and light over Russia. No general change later.

Barometer highest, 30·1 ins. and more to 30·0 ins. in two anticyclones—one lying over Scandinavia, the other over the western parts of our Islands and the Atlantic; 30·0 ins. to 29·9 ins. in another system over the Black Sea and south-eastern Europe. Lowest, (1) 29·6 ins. and less to 29·7 ins. in a depression over the Mediterranean and the southern parts of France; (2) 29·7 ins. to 29·8 ins. over northern, central, and western Russia; (3) about 29·8 ins. over the northern part of the Shetlands. Falling irregularly over the British Isles later.

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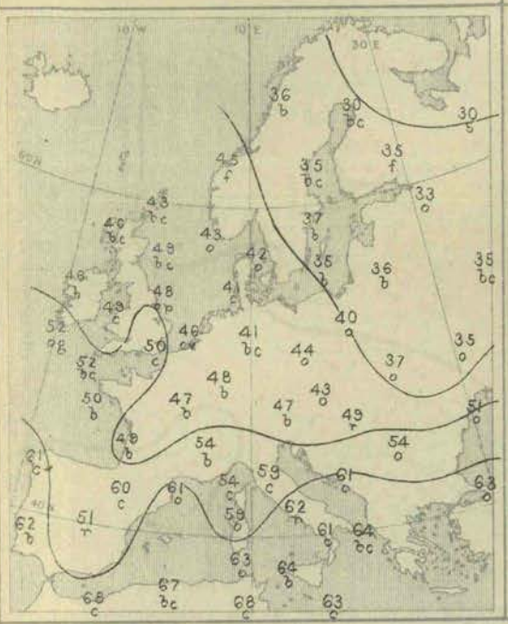
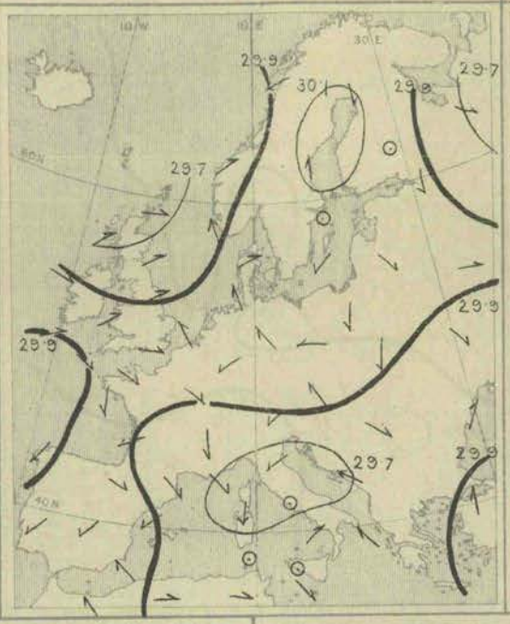
Saturday, 29th April.

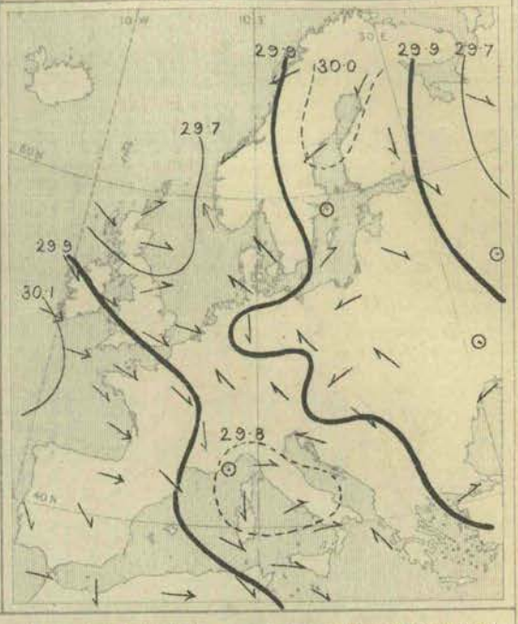
Temperature and Weather. — 8 a.m.



Barometer and Wind. — 8 a.m.



Barometer and Wind. — 6 p.m.



Weather in morning still fine and bright over south Germany, France, the south-western parts of the British Islands, and in Sweden; cloudy or overcast in most other places, and becoming less fair generally than of late. Rain at some stations over southern and south-eastern Europe, and the northern parts of Ireland and England; snow at Archangel. Rain later in the west and north of the United Kingdom, and slight showers over the south-eastern countries: slight snow showers in Russia.

Temperature risen somewhat over southern and south-eastern Europe, fallen elsewhere. Morning readings exceeding 60° at many of the Mediterranean stations, at Constantinople, and on the Atlantic coasts of the Iberian Peninsula, and exceeding 50° in the south and south-west of our Islands; below 40° over eastern and northern Europe, and as low as 30° at Archangel and Haparanda, 33° at St. Petersburg, 35° at Hernösand, Moscow, and Kiev. Rising later to a little above 60° over England and the north of France, to 70° and more in the south of France and over many parts of Italy, and to 80° and more in some parts of Algeria.

Wind light and anticyclonic over the northern half of Europe, and also over the south-western and southern parts of our Islands and the north and west of France; South-Westerly to Westerly, moderate, but cyclonic, over Scotland, and variable, but cyclonic, over the Mediterranean and south of Russia; South-Easterly on the eastern shores of the North Sea. No great change later.

Barometer highest, 30·1 ins. and more to 30·0 ins. over Sweden, the Baltic, and north Germany, as well as in the eastern part of an anticyclone spreading from the Atlantic towards the south-west of our Islands, the Bay of Biscay, and Spain. Lowest, 29·7 ins. and less over the north of Scotland, the Shetlands, and Hebrides, and also over the northern parts of the Mediterranean, Italy, and the Adriatic. Rising somewhat on our north-western coasts later, but a "hollow" forming over Scotland and the North Sea.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are show by arrows, which are drawn flying *with the wind*, the force is indicated thus : ⟫⟶ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breese: and ⊙ = a calm. In the left-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Germany, Sweden, and Norway, and 7 a.m. in France, Algeria, Italy, Austria, and Russia; that for 6 p.m. is prepared from observations made at 6 p.m. in the British Islands and France, 7 p.m. in Algeria, 8 p.m. in Sweden and Norway, Germany, and Austria, and 9 p.m. in Russia, Belgium, and Italy. The time indicated in each case is the standard time for each country.

GENERAL NOTES.

During the greater part of this week anticyclonic conditions continued prevalent over the British Islands and their neighbourhood, and the weather in those regions was consequently still very fine and dry. Over Russia on the one hand, and Spain on the other, conditions were less settled—the distribution of pressure being cyclonic, and snow showers of frequent occurrence in the former region, rain in the latter. After Thursday, however, a change was apparent; some depressions began to appear near to and over the northern parts of the United Kingdom, and to spread southward over the North Sea, in which region South-Westerly to North-Westerly winds became prevalent in the north, rain fell daily, and in some places was considerable; snow, sleet, and hail showers were reported in several regions, while on Saturday there was a little rain in all but the extreme southern parts of the Kingdom, and thunder occurred at Yarmouth. In Spain the weather at this time had improved a little, but rain spread over the south of France and north of Italy during Thursday and Friday, with thunder locally.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 98.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	48·8	?	47	?	EASTBOURNE	73·6	?	74	?
OSWALDKIRK (Yorkshire)	64·3	?	62	?	TENBY	73·7*	?	73*	?
WORKSOP	59·6	+26·6	58	+ 26	NEWQUAY	76·0	?	76	?
THURCASTON (Leicestershire)	65·7	+34·8	64	+ 33	TORQUAY	74·6*	?	75*	?
MARGATE	62·7	?	63	?	ARLEY COTTAGE (County Cavan)	50·8	?	49	?
WESTBOURNE (Sussex)	72·8*	?	73*	?	GUERNSEY	76·1*	?	77*	?
BRIGHTON	72·0	?	72	?					

* The values at Westbourne, Tenby, Torquay and Guernsey are obtained by Jordan's Photographic Recorder.

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WEEKLY WEATHER REPORT.

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VOL. X. No. 18.] *Third Series.* WEEK ENDING SATURDAY, 6TH MAY, 1893. [*Price 6d.* [*Annual Subscription, post paid*, £1 10*s.* 0*d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871-90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the twenty-five years 1866-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the ten years 1881-90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

	DISTRICTS. (See p. 104.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 1st, 1893. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	77	27	55·1	40·2	47·2	2 above.	44	+11	5	- 5	374	+168	485	-38
	1. SCOTLAND, EAST	72	28	55·3	39·7	47·0	1 above.	45	+ 2	6	- 2	433	+137	548	- 9
	2. ENGLAND, N.E.	73	35	57·3	41·9	49·3	3 above.	52	+11	0	- 5	451	+175	434	-58
	3. ENGLAND, EAST	76	34	61·5	42·0	51·2	3 above.	64	+10	0	- 6	602	+238	524	-28
	4. MIDLAND COUNTIES	77	28	65·1	41·9	52·9	5 above.	76	+21	0	- 6	699	+310	501	-40
	5. ENGLAND, SOUTH	80	37	63·5	45·0	53·7	4 above.	82	+22	0	- 3	667	+248	371	-42
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	70	37	57·4	43·7	50·1	3 above.	57	+10	0	- 5	500	+198	354	-55
	7. ENGLAND, N.W.	75	36	60·5	45·3	52·5	4 above.	74	+24	0	- 4	580	+270	323	-88
	8. ENGLAND, S.W.	80	37	62·0	46·3	53·7	5 above.	82	+28	0	- 3	714	+294	246	-68
	9. IRELAND, NORTH	72	37	59·5	45·9	52·3	4 above.	72	+22	0	- 4	579	+194	258	-99
	10. IRELAND, SOUTH	73	36	61·1	48·5	54·4	5 above.	87	+32	0	- 3	727*	+235	178	-97
	—CHANNEL ISLANDS	75	39	62·2	48·9	55·2	4 above.	92	+33	0	0	849	+346	70	-52

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 104.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the mean for the Week.	From Jan. 1st, 1893. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 1st, 1893. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in	10ths of in.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	3	3	3 less.	81	- 5	15·2	- 1·8	24	- 10	22	- 8	344	- 12	25	- 1
	1. SCOTLAND, EAST	3	2	3 less.	65	- 3	7·2	- 2·8	32	- 14	30	-11	440	+ 44	32	+ 3
	2. ENGLAND, N.E.	3	2	2 less.	53	-12	5·2	- 2·5	43	+ 8	40	+10	509	+161	37	+ 12
	3. ENGLAND, EAST	2	1	4 less.	55	- 9	5·3	- 2·2	52	+ 9	50	+ 8	594	+174	43	+ 13
	4. MIDLAND COUNTIES	2	1	3 less.	53	- 8	5·2	- 3·4	50	+13	48	+12	572	+199	41	+ 14
	5. ENGLAND, SOUTH	1	less than ½	4 less.	51	-10	6·0	- 2·9	58	+ 20	56	+17	612	+218	44	+ 16
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	3	3	3 less.	67	- 6	11·6	- 5·6	31	- 11	29	-11	475	+ 98	34	+ 7
	7. ENGLAND, N.W.	3	3	2 less.	56	-11	7·2	- 3·1	43	+ 2	41	+ 2	488	+121	35	+ 8
	8. ENGLAND, S.W.	2	1	5 less.	53	-16	9·2	- 4·2	59	+ 13	57	+13	642	+190	46	+ 14
	9. IRELAND, NORTH	3	4	1 less.	69	- 7	9·4	- 2·1	19	- 23	18	-22	397	+ 20	29	+ 2
	10. IRELAND, SOUTH	3	3	3 less.	60	-12	10·0	- 3·6	28	- 15	27	-15	475	+ 28	34	+ 2
	—CHANNEL ISLANDS	1	less than ½	5 less.	59	-16	7·6	- 3·5	82	+ 30	81	+28	719	+186	51	+ 13

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather was somewhat unsettled in the west and north during the earlier part of the week, and rain was experienced in those regions almost daily. In the south and south-east, however, although the appearance was less fine than of late, the conditions, except in a few localities, remained dry. Towards the end of the week the weather again became fine, dry, and settled over the entire Kingdom.

Temperature continued above the mean, the excess ranging from 1° in Scotland E., and 2° in Scotland N., to 4° or 5° in most other districts. The highest of the maxima were registered either on the 4th or 5th, when they ranged from 80° in England S. and S.W., and 77° in Scotland N. and the Midland Counties, to 70° in Scotland W. The lowest of the minima were recorded during the earlier days of the week, and varied from 27° in Scotland N., and 28° in Scotland E. and the Midland Counties, to 36° or 37° in the western and southern districts, and to 39° in the Channel Islands.

Rainfall was again less than the mean in all parts of the Kingdom. Over eastern, central, and southern England the fall was extremely slight, and in some localities there was no fall whatever; in Ireland, Scotland, and the north-west of England the fall amounted to two or three, and in Ireland N. to four tenths of an inch.

Bright Sunshine shows a general decrease on that reported of late: owing to the cloudiness during the earlier part of the week in Ireland and Scotland the aggregate was less than the normal. The percentage of the possible duration ranged from 18 to 27 in Ireland, from 22 to 30 in Scotland, and from 40 to 57 in England. In the Channel Islands, however, the percentage was again as high as 81.

Barometer and Wind.—During the early part of the period some shallow depressions advanced over the northern half of our Islands from the westward causing moderate or light South-Westerly and Southerly winds. As the week progressed, however, the disturbances passed off and the conditions gradually became anticyclonic, with moderate winds from the Eastward or South-Eastward.

* This value has been altered owing to the receipt of further information.

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II.—DATA from which the SUMMARY on page 103 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°	°			Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	53	35	50·6	39·0	44·5	+ 1·3	30	8	1	0·01	−0·39	*	*	*	*
	Stornoway	65	32	55·1	40·9	47·6	+ 2·4	44	3	5	0·54	−0·03	32·2	− 9·6	30	− 8
	Wick	52	32	50·0	38·4	43·9	− 0·9	28	10	4	0·55	+0·13	*	*	*	*
	Lairg Ⓢ	71	27	55·9	39·0	46·9	+ 1·5	47	8	5	0·33	−0·17	*	*	*	*
	Glencarron Ⓢ	77	31	57·2	40·7	48·5	+ 3·5	51	4	4	0·30	−0·39	*	*	*	*
	Fort Augustus Ⓢ	76	30	59·9	40·3	49·5	+ 4·0	60	5	3	0·07	−0·43	16·2	?	15	?
	Fort William Ⓢ	69	35	57·0	42·8	49·5	+ 2·2	53	0	2	0·21	−0·57	23·1	?	21	?
1. SCOTLAND, E.	Nairn	72	28	56·6	38·6	47·1	+ 0·6	50	10	3	0·18	−0·12	*	*	*	*
	Aberdeen	52	35	49·3	40·3	44·8	− 1·6	25	5	5	0·29	−0·19	25·4	−13·6	24	−12
	Braemar Ⓢ	66	28	54·4	37·5	45·4	+ 1·9	43	13	3	0·12	−0·41	32·2†	?†	30†	?†
	Ochtertyre Ⓢ										*	*	*	*	*	*
	Leith	67	37	56·9	42·0	49·0	+ 1·6	49	0	3	0·17	−0·23	*	*	*	*
	Marchmont Ⓢ	68	34	59·3	39·9	49·0	+ 3·7	58	6	3	0·23	−0·31	40·0	?	37	?
2. ENGLAND, N.E.	Alnwick Castle	66	35	55·1	41·4	47·8	+ 2·9	43	2	4	0·23	−0·31	*	*	*	*
	Durham	73	36	61·6	40·7	50·5	+ 4·4	65	4	3	0·33	−0·14	44·2	+10·2	42	+ 9
	Shields	63	37	53·7	41·3	47·1	+ 1·0	39	2	3	0·19	−0·21	*	*	*	*
	Scarborough Ⓜ										*	*	*	*	*	*
	York	72	39	62·4	42·0	51·6	+ 3·7	67	0	3	0·18	−0·27	46·0	+ 8·0	43	+ 8
	Spurn Head	65	42	55·4	44·3	49·5	+ 2·5	53	0	2	0·22	−0·10	*	*	*	*
3. ENGLAND, E.	Hillington Ⓜ	74	37	62·1	41·1	51·0	+ 2·6	67	3	2	0·22	−0·20	54·1	+10·9	52	+10
	Yarmouth	59	40	54·7	44·1	49·1	+ 1·6	50	0	1	0·08	−0·34	*	*	*	*
	Geldeston	66	38	60·1	41·4	50·2	+ 2·0	60	2	2	0·08	−0·32	54·5	+ 8·3	52	+ 6
	Cambridge	76	34	66·7	41·6	53·4	+ 4·0	81	1	2	0·03	−0·37	47·7	+ 7·1	46	+ 7
	Rothamsted	71	38	64·1	41·7	52·2	+ 4·1	73	1	1	0·01	−0·52	50·4	?	48	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	75	28	66·6	37·7	51·3	+ 2·9	83	12	2	0·11	−0·32	*	*	*	*
	Loughborough	77	37	66·3	43·0	54·0	+ 4·7	84	0	3	0·12	−0·35	*	*	*	*
	Stamford (Ketton Hall)	75	35	64·9	41·3	52·4	+ 2·8	76	2	2	0·04	−0·46	*	*	*	*
	Cheadle Ⓜ	71	38	61·1	43·6	51·8	+ 4·7	69	0	2	0·61	+0·09	*	*	*	*
	Churchstoke Ⓜ	75	39	63·4	42·7	52·4	+ 5·9	73	0	3	0·11	−0·34	48·4	+10·4	46	+ 9
	Hereford Ⓜ	77	39	65·7	43·4	53·9	+ 5·3	83	0	1	0·04	−0·41	*	*	*	*
	Cirencester	76	36	66·6	40·7	52·9	+ 5·2	82	4	1	0·03	−0·47	54·2	+13·9	52	+13
	Oxford	77	38	66·4	43·1	54·1	+ 4·9	85	0	1	0·01	−0·44	54·7	+14·9	53	+15
5. ENGLAND, S.	London	74	40	66·3	44·3	54·6	+ 4·0	88	0	1	0·01	−0·43	49·3†	+12·8†	47†	+11†
	North Foreland	65	42	58·1	45·7	51·5	+ 2·8	67	0	0	—	?	*	*	*	*
	Strathfield Turgiss Ⓜ	80	37	60·9	41·0	54·6	+ 5·2	92	3	3	0·10	−0·32	*	*	*	*
	Dungeness	64	43	60·4	45·9	52·7	+ 3·3	75	0	0	—	−0·40	*	*	*	*
	Hastings (St. Leonards)	63	40	59·3	45·3	51·9	+ 2·0	69	0	0	—	−0·40	62·9	+16·0	61	+15
	Southampton	75	42	66·5	45·6	55·4	+ 4·9	94	0	0	—	−0·50	68·4	+24·8	66	+24
	Hurst Castle	71	44	62·7	48·1	55·0	+ 5·5	91	0	0	—	−0·42	*	*	*	*
	Stowell Ⓜ	75	40	64·5	43·7	53·5	+ 5·1	81	0	1	0·01	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	70	37	57·5	44·2	50·5	+ 2·8	60	0	4	0·36	−0·47	*	*	*	*
	Glasgow	63	37	56·1	42·9	49·1	+ 1·6	50	0	3	0·35	−0·15	27·2	− 8·1	25	− 7
	Ardrossan	67	40	56·3	44·0	49·8	+ 1·3	55	0	3	0·19	−0·33	*	*	*	*
	Glenlee Ⓢ	69	39	60·2	42·4	50·8	+ 4·5	62	0	4	0·58	−0·08	*	*	*	*
	Douglas (Isle of Man)	65	41	56·7	44·8	50·4	+ 2·7	59	0	3	0·09	−0·41	34·3	−14·2	32	−15
7. ENGLAND, N.W.	Newton Reigny	68	36	60·3	41·3	50·2	+ 4·7	60	2	3	0·16	−0·30	41·8	0·0	39	0
	Stonyhurst	68	40	58·9	43·9	51·0	+ 2·9	63	0	3	0·35	−0·22	45·9	+ 6·4	43	+ 6
	Blackpool Ⓜ	72	43	61·3	46·1	53·2	+ 4·7	78	0	2	0·09	−0·31	36·8	− 5·3	35	− 5
	Manchester	72	41	61·3	45·1	52·7	+ 5·0	75	0	3	0·25	−0·24	45·8†	?	44†	?
	Liverpool Obsy. (Bidston)	75	44	61·4	46·7	53·6	+ 4·7	81	0	3	0·23	−0·17	*	*	*	*
	Llandudno Ⓜ	71	44	60·2	47·6	53·5	+ 4·1	81	0	3	0·69	+0·27	44·7	+ 4·6	43	+ 4
	Holyhead	72	43	60·4	46·7	53·1	+ 4·1	78	0	3	0·27	−0·15	*	*	*	*
8. ENGLAND, S.W.	Llandovery	80	37	67·3	43·9	55·1	+ 6.9	92	0	2	0·45	−0·18	*	*	*	*
	Pembroke	68	45	57·3	47·7	52·2	+ 3·7	71	0	3	0·12	−0·33	49·9	+ 2·0	48	+ 2
	Bristol (Montpelier)	79	43	66·3	46·5	55·8	+ 6·6	97	0	1	0·02	?	*	*	*	*
	Arlington (N. Devon)	73	40	62·0	45·1	53·0	+ 5·5	77	0	2	0·15	−0·52	*	*	*	*
	Cullompton Ⓜ	74	39	65·3	42·6	53·3	+ 4·5	79	0	2	0·05	−0·51	59·4	+20·6	58	+20
	Falmouth	64	45	59·4	48·2	53·5	+ 3·7	81	0	1	0·02	−0·66	58·9	+13·2	57	+12
	Plymouth	71.	45	61·0	48·3	54·3	+ 3·3	86	0	1	0·02	−0·48	59·4	+15·3	58	+15
	Prawle Point	61	42	57·6	47·7	52·4	+ 3·7	73	0	0	—	−0·40	*	*	*	*
9. IRELAND, N.	Malin Head	66	41	58·0	47·1	52·2	+ 3·5	71	0	3	0·62	?	*	*		*
	Londonderry	69	40	60·8	46·2	53·1	+ 3·9	78	0	3	0·42	−0·08	*	*	*	*
	Edenfel (Omagh)	71	38	59·6	43·9	51·3	+ 3·9	65	0	3	0·42	−0·06	*	*	*	*
	Belmullet	66	43	59·3	48·4	53·5	+ 3·8	81	0	3	0·52	?	*	*	*	*
	Markree Castle	70	39	61·0	46·0	53·1	+ 5·1	78	0	3	0·43	−0·08	13·9	−26·6	13	−26
	Brookeborough	69	38	59·7	45·0	51·9	+ 4·7	69	0	3	0·51	−0·06	*	*	*	*
	Armagh	66	38	59·0	45·2	51·7	+ 4·1	68	0	3	0·27	−0·22	19·0	−20·0	18	−19
	Donaghadee	61	45	56·4	47·0	51·4	+ 3·6	66	0	3	0·21	−0·29	*	*	*	*
	Edgeworthstown	72	37	62·1	44·4	52·7	+ 5·3	75	0	3	0·57	+0·05	*	*	*	*
10. IRELAND, S.	Dub'in	69	40	61·4	47·9	54·3	+ 4·8	86	0	3	0·53	+0·07	37·4	− 7·6	36	− 7
	Parsonstown	73	40	63·0	47·4	54·7	+ 6·3	89	0	3	0·23	−0·25	22·4	−18·8	21	−20
	Kilkenny	69	39	62·3	46·1	53·7	+ 4·9	82	0	3	0·30	−0·17	*	*	*	*
	Waterford	66	36	60·4	45·4	52·5	+ 2·5	74	0	2	0·44	−0·10	*	*	*	*
	Roche's Point	60	44	58·6	49·1	53·6	+ 3·4	81	0	2	0·25	−0·48	*	*	*	*
	Valencia	70	47	61·7	51·7	56·4	+ 6·3	101	0	3	0·52	−0·31	25·1	−20·2	24	−20
	Killarney	69	43	61·7	49·5	55·2	+ 5·7	92	0	3	0·39	?	*	*	*	*
	Foynes	66	47	59·8	50·7	55·0	+ 5·5	91	0	2	0·08	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	62	48	59·4	50·1	54·5	+ 4·0	88	0	1	0·03	−0·45	*	*	*	*
	Jersey	75	39	65·0	47·6	55·8	+ 4·6	97	0	0	—	−0·47	18·5	+29·9	79	+28

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Stations marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

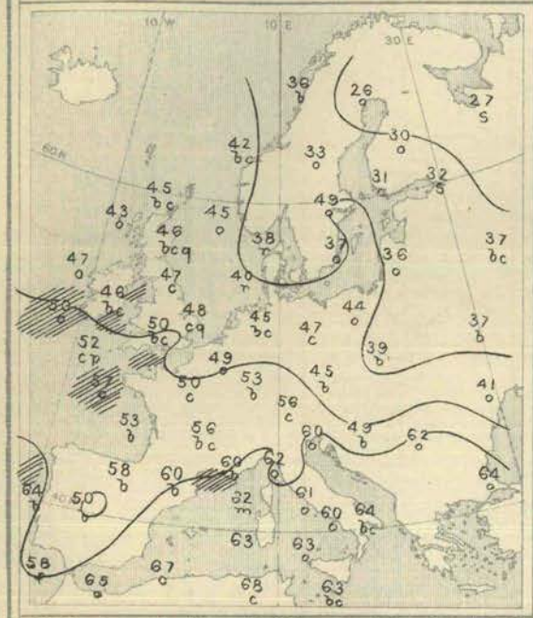
† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row) at the Kew Observatory, and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

NOTE.—It will be observed that Bristol (Montpelier) has been added to the list of stations in England S.W.

Sunday, 30th April.

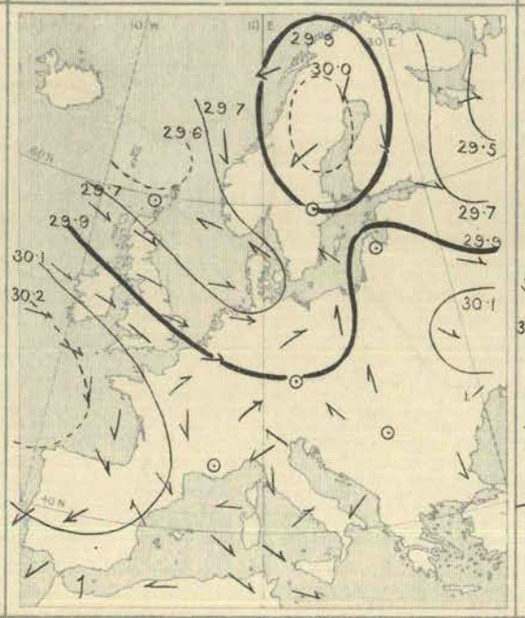
Temperature and Weather.

8 a.m.

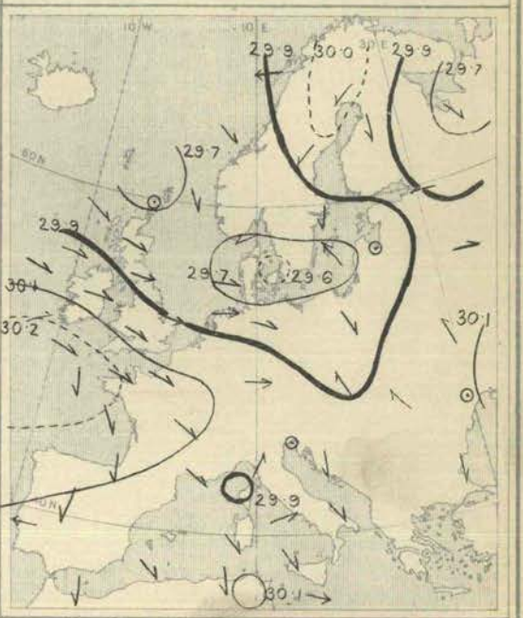


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning fine and bright over central and western Europe, including England, also over the northern half of Scandinavia; cloudy or overcast elsewhere; dull and rainy over Denmark, unsettled over northern Russia, with snow at Archangel and St. Petersburg. Rain falling later in small quantities at the Irish and Scotch stations generally, as well as on the eastern shores of the North Sea. Snow in some parts of northern Russia. Aurora seen in the north of Scotland at night. Lunar halo at Prawle Point.

Temperature becoming unsteady, but risen over central Europe, fallen over Russia. Morning readings exceeding 60° at most of the Mediterranean stations, and exceeding 50° over France and the west and south of our Islands. Lower elsewhere, and, lowest of all, 26° at Haparanda, 27° at Archangel, 30° at Kuopio, 31° at Hangö, and below 40° over Russia, the Gulf of Bothnia, and the Gulf of Riga. Not touching 60° at any of our own stations (excepting Cambridge and Hurst Castle) during day, but exceeding that point in several parts of France, and exceeding 70° at most of the Spanish and Italian stations.

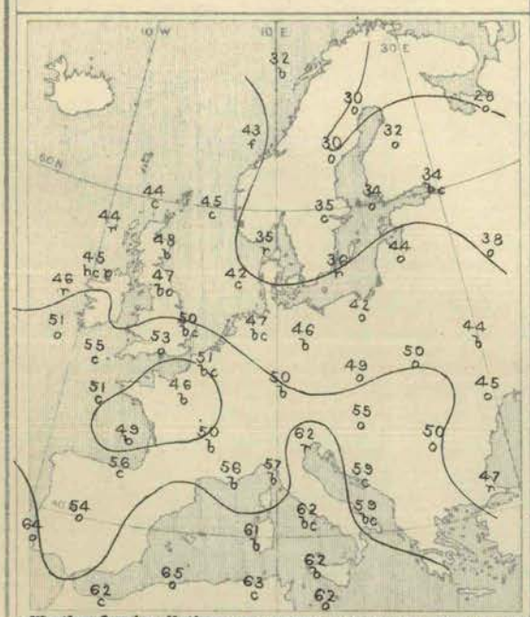
Wind (1) Westerly to North-Westerly in direction over the whole of the British Islands and the north of Holland, South-Westerly over France and western Germany; (2) South-Easterly over the Baltic and southern half of Scandinavia, and very variable over Russia, central, south-eastern and southern Europe. Freshening considerably over the United Kingdom during the day. Little change elsewhere.

Barometer highest, (1) 30·2 ins. and more to 30·0 ins. in the eastern portion of an anticyclone spreading in from the Atlantic over Spain, the western parts of France, and the south-west of our Islands; (2) 30·0 ins. and more to 29·8 ins. over Finland and the north-eastern half of Scandinavia; (3) 30·1 ins. to 30·0 ins. over the southern half of Russia. Lowest, 29·6 ins. and less in a depression lying to the northward of the Shetlands, and below 29·7 ins. in a "hollow" extending thence in a south-easterly direction across the North Sea to Denmark. Changing little and irregularly over western Europe later, subsidiary "hollow" over North Sea breaking up and southern portion moving eastwards across Denmark.

Monday, 1st May.

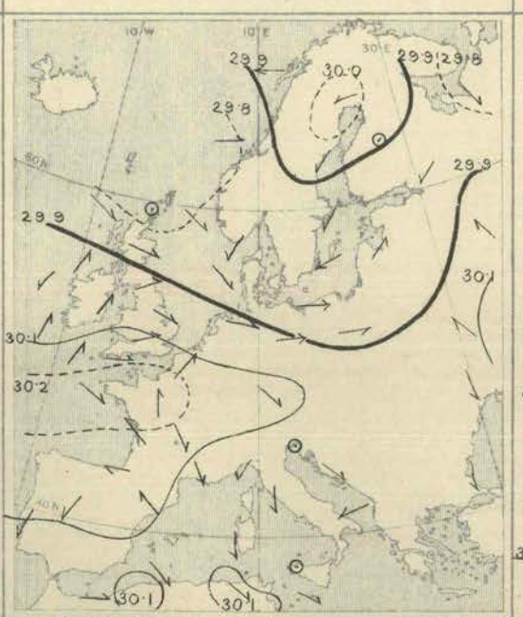
Temperature and Weather.

8 a.m.

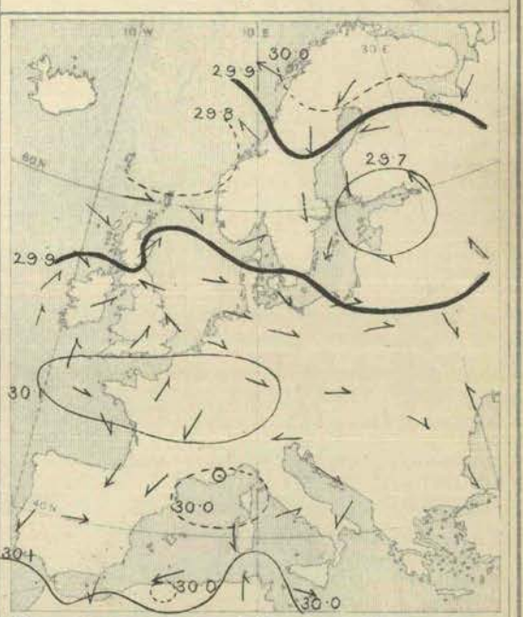


Barometer and Wind.

8 a.m.



6 p.m.



Weather fine in all the more eastern and southern parts of Great Britain, as well as over the Netherlands and the greater part of central and southern Europe. Raining at several of our western stations; dull in many parts of Scandinavia, Denmark, and Russia, with rain at Wisby and Skagen, and with snow at Archangel. A little rain falling later in all but the extreme southern parts of the United Kingdom, as well as in Holland and north Germany; snow falling at several of the Russian stations.

Temperature risen generally, but fallen a little in Denmark, France, and south Germany. Morning readings highest, 69° at Barcelona and Sfax, 65° at Oran and Algiers, and 64° at Lisbon; above 60° at the Mediterranean stations generally. Lowest, 28° at Archangel, 30° at Haparanda and Hernösand, 32° at Kuopio, and 33° at Helsingfors and Faerder; below 40° in many parts of Scandinavia and Russia, and below 45° in the extreme north of Scotland. Daily maxima over our Islands below 60° at all but one or two of our southern stations, and below 55° in the northern parts of the Kingdom. Thermometer exceeding 65° in France, and exceeding 70° in many parts of southern Europe, the highest reading of all being 77° at Barcelona, Madrid, and Oporto.

Wind light to moderate from the Westward or South-Westward over the United Kingdom and the Netherlands, and from the Westward or North-Westward over Germany and the eastern shores of the North Sea; North-Easterly over Finland, Sweden, and the north of Norway; light from the South-Eastward over the southern parts of Russia; variable in Italy and Algeria, light from the Eastward or North-Eastward over Spain and the west and south of France. No important change occurring during day.

Barometer highest, 30·2 ins. and upwards in an anticyclone lying over the northern parts of France and the Bay of Biscay, 30·1 ins. and upwards in another system lying over the southern parts of Russia, 30·0 ins. and upwards in a third lying over the north of Sweden. Lowest, 29·6 ins. and less in a depression over the Baltic Provinces; 29·8 ins. and less in a large shallow area lying to the northward of Scotland and the westward of Norway. Former depression subsequently moving slowly eastwards; latter disturbance moving away to the north-eastward, but small shallow systems passing eastwards across our Islands during day.

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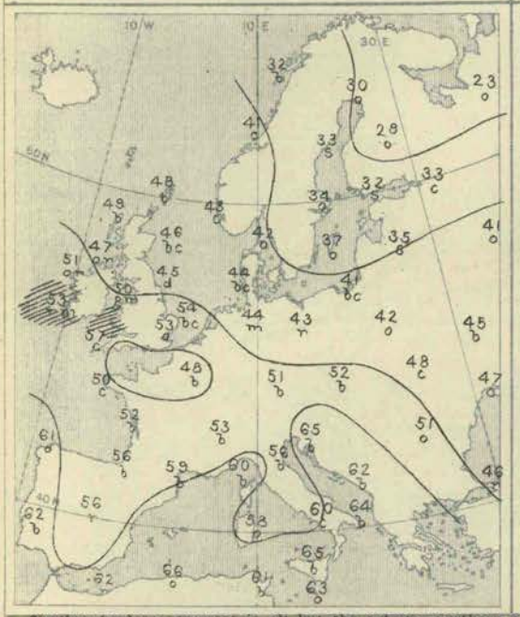
Tuesday, 2nd May.

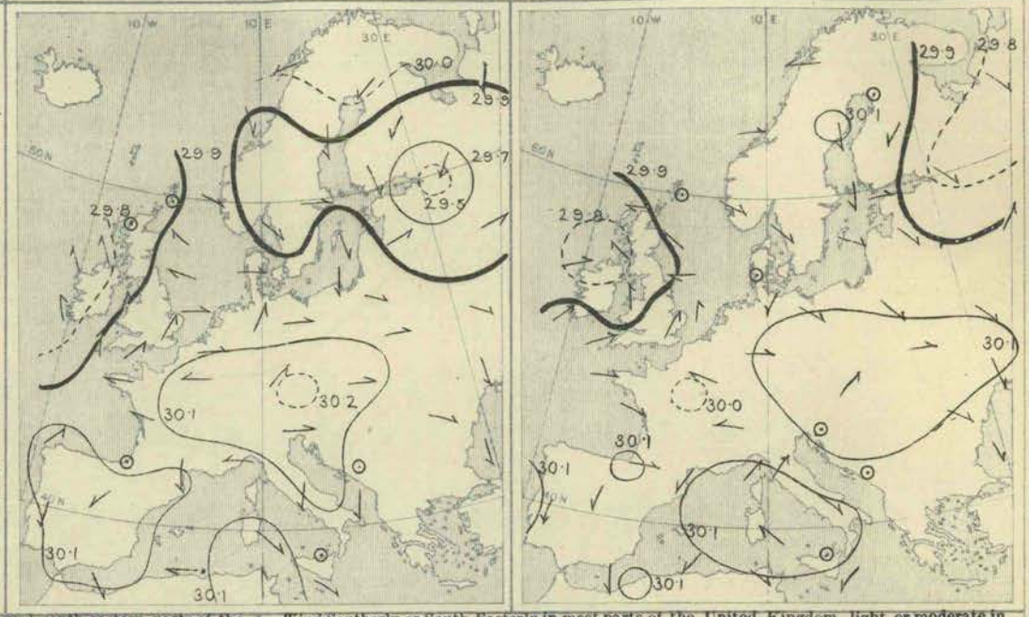
Temperature and Weather. 8 a.m.



Weather cloudy or overcast in all but the extreme northern and south-eastern parts of the United Kingdom, with rain at all Irish stations; dull also in many parts of Scandinavia, Denmark, Germany, and Russia; rain falling at several of the German stations and snow over the Gulf of Finland. Fine and bright over France and the greater part of southern Europe, but rain falling at Madrid and also at Nemours. Rain falling later in all the more western and northern parts of the United Kingdom, and slight showers in the Netherlands and some parts of our south-eastern counties, but weather remaining very dry in the extreme south of our Islands.

Temperature changed very irregularly. Morning readings highest, 74° at Barcelona, 67° at Oran and Sfax, and 66° at Algiers; above 60° over the Mediterranean and Adriatic generally, as well as on the coast of the Spanish Peninsula. Lowest, 23° at Archangel, 28° at Kuopio, 30° at Haparanda, and 32° at Uleaborg and Hangö; below 40° over the whole of Sweden and northern Russia. Rising during day to between 60° and 64° over the central and southern parts of England, exceeding 70° at many of the French stations, and exceeding 75° at Lyons, as well as in some parts of Spain and Italy.

Barometer and Wind. 8 a.m. 6 p.m.

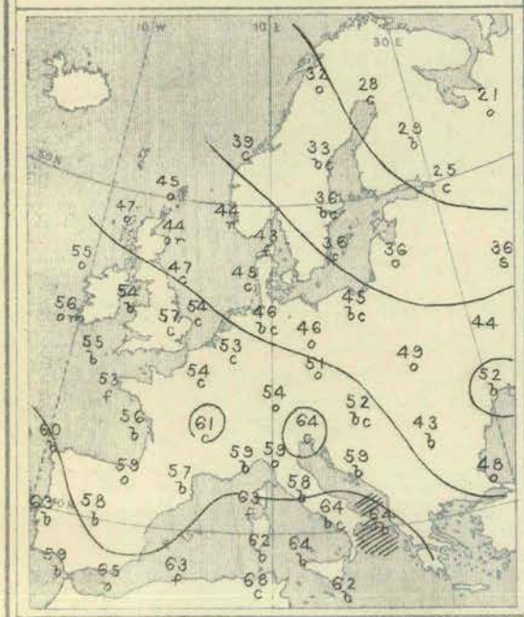


Wind Southerly or South-Easterly in most parts of the United Kingdom, light or moderate in force generally, but fresh on our extreme south-west coasts. Westerly over Denmark, Germany, Austria, and the central parts of Russia, but North-Easterly over the northern parts of Russia and Scandinavia. Easterly in the west and south of France, North-Easterly in Spain, Northerly in Italy. Light Easterly breezes setting in later over the northern parts of our Islands, but wind shifting to the Westward in the west of France. No important change occurring elsewhere.

Barometer highest, 30·1 ins. and upwards in three large areas lying over various parts of central and southern Europe and the Mediterranean. Lowest, 29·6 ins. and less in a depression having its centre near St. Petersburg; 29·8 ins. and less in a shallow disturbance lying to the westward of our Islands. Shallow secondary systems appearing later over various parts of Ireland and England, and distribution of pressure becoming very irregular. Russian depression moving north-eastwards and filling up.

Wednesday, 3rd May.

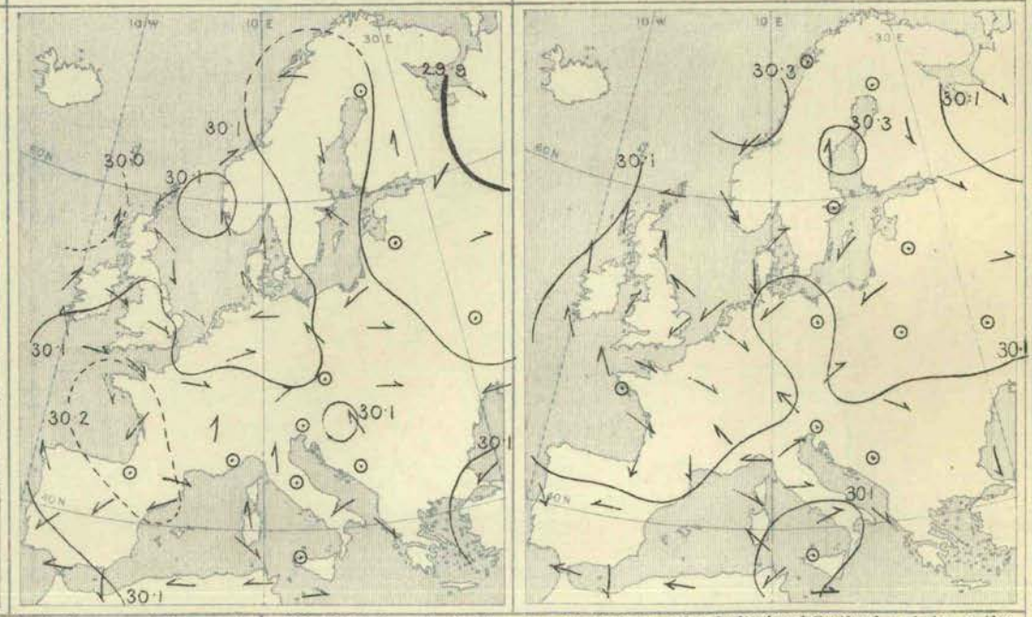
Temperature and Weather. 8 a.m.



Weather fine in Wales, the extreme south of England, the Netherlands, France, and the greater part of southern and eastern Europe, as well as in Sweden and Finland; dull in most other localities, with rain in the east of Scotland and the south-west of Norway, as well as at some of the German stations; snow falling at Moscow. Rain continuing in Scotland during greater part of day, and extending from Germany to Austria; weather remaining fair and dry in nearly all other parts of Europe.

Temperature risen generally, but fallen a little in some parts of Russia, Austria, and Italy. Morning readings highest, 70° at Sfax, 68° at Barcelona and La Calle, and 65° at Oran, above 60° at nearly all the Mediterranean stations, and also on the coasts of Spain, above 55° in the southern parts of the United Kingdom. Lowest, 21° at Archangel, 25° at St. Petersburg, 28° at Haparanda, 29° at Kuopio, and 30° at Uleaborg; below 40° at most of the Scandinavian Stations. Rising during day to 65° or more over the central parts of Ireland and England, and reaching 69° at Oxford; exceeding 70° over the southern parts of Europe generally, the highest readings of all being 82° at Cette and 81° at Perpignan.

Barometer and Wind. 8 a.m. 6 p.m.



Wind light from the Southward or South-Eastward in Ireland and Scotland, and also on the eastern shores of the North Sea; Westerly or North-Westerly over the greater part of England and France; Northerly or North-Westerly in Sweden and Finland, Westerly over Poland and the central parts of Russia; variable in Germany, Austria, and Italy; Easterly or North-Easterly in Spain and Algeria. No important change occurring during day.

Barometer highest, 30·2 ins. and upwards over the Bay of Biscay, the north-east of Spain and the western parts of France, 30·1 ins. and upwards in an anticyclone covering nearly the whole of central and southern Europe, with a considerable portion of England and Ireland, and extending northwards in the form of a long band across Sweden and the north of Norway. Lowest, 22·9 ins. and less in a large shallow depression lying over northern Russia. No important change occurring later, but barometer rising in most parts of western and northern Europe.

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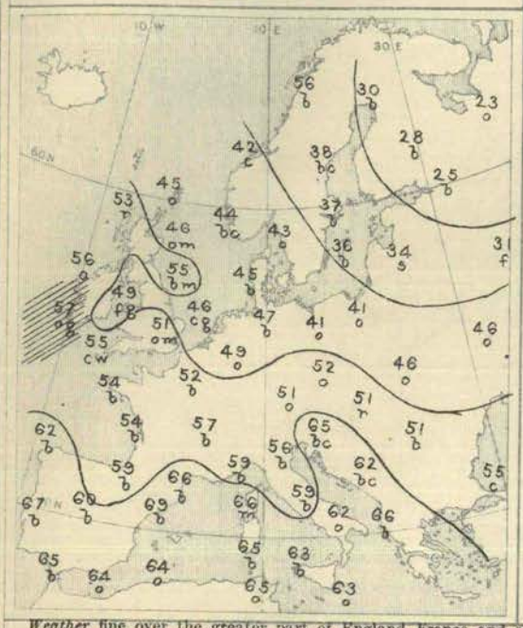
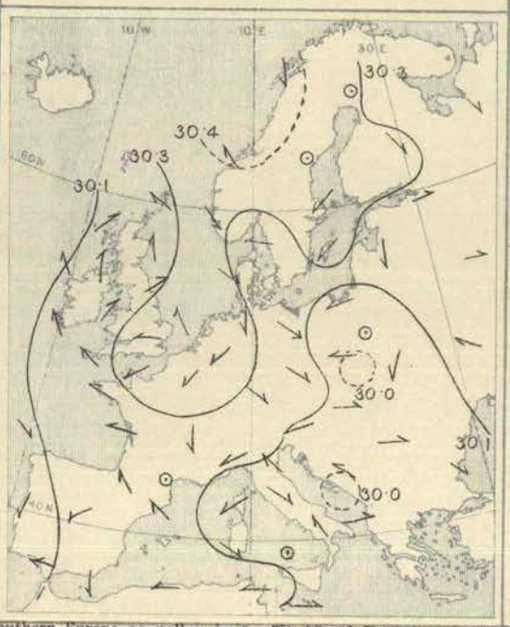
Thursday, 4th May.

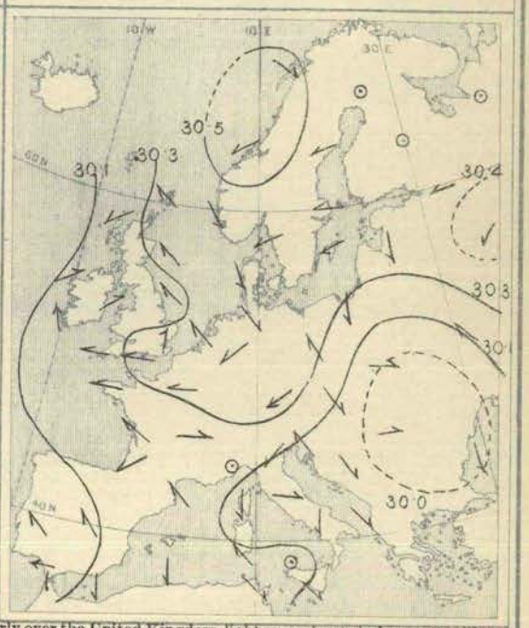
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fine over the greater part of England, France, and southern Europe, as well as in Scandinavia, Denmark, and Finland. Dull in the west and north of our Islands, with fog in several places, and with rain in the north of Scotland; dull also in Germany, Austria, and the western and central parts of Russia, with rain at Cracow and Buda-Pesth, and with snow at Riga. No important change occurring over western Europe during day, but heavy rain falling at some of the Austrian stations.

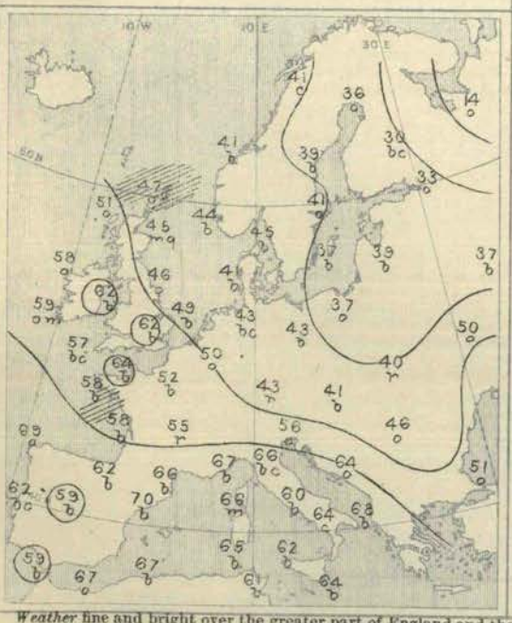
Temperature fallen in most countries, but risen in Scotland, Scandinavia, and the west of Ireland, as well as in Spain. Morning readings highest, 71° at Sfax, 69° at Barcelona, 67° at Lisbon, and 66° at Sanguinaires and Brindisi; above 60° at most of the Mediterranean stations, and just touching that point in the Channel Islands. Lowest, 23° at Archangel and Uleaborg, 25° at St. Petersburg, 28° at Kuopio, and 30° at Haparanda, below 40° at most stations in Russia and Scandinavia. Rising during day to between 72° and 77° over the inland parts of England and the greater part of France, but not exceeding 69° at Lisbon. Exceeding 75° over central Spain and the south of Italy, and reaching 81° at Madrid.

Wind South-Easterly or Southerly over the United Kingdom, light or moderate in force generally, but fresh or strong on our extreme south-west coasts. Variable over the northern parts of Scandinavia, light from the North-Westward over the northern parts of Russia, and moderate from the same quarter or from North over Denmark, Germany, and the south of Scandinavia. Light and variable in Italy, Easterly or North-Easterly in France, Spain, and Algeria. No important change occurring during day.

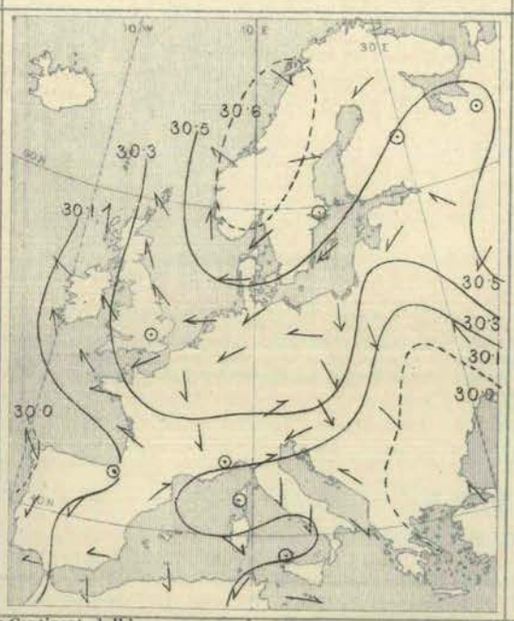
Barometer highest, 30·4 ins. and upwards in the west of Norway; 30·1 ins. and upwards in an anticyclone covering all but the south-eastern parts of Europe. Lowest, 30·0 ins. and less in two small shallow depressions—one lying over Poland, and the other over the southern part of the Adriatic. No important change occurring during day, but depressions over Poland and the Adriatic gradually dispersing.

Friday, 5th May.

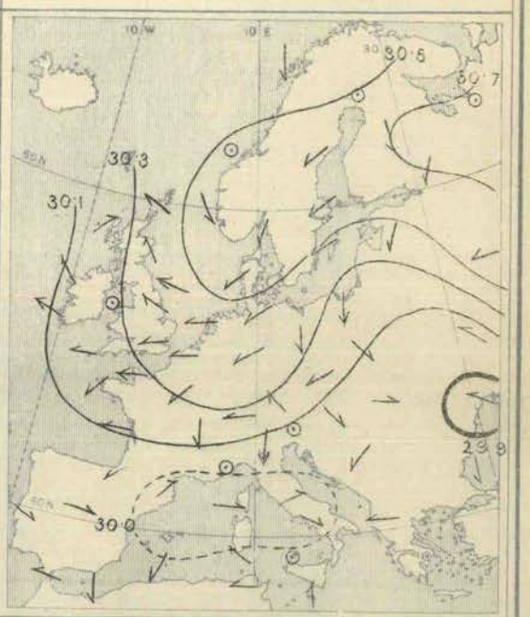
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fine and bright over the greater part of England and the Continent, dull in many parts of Ireland and Scotland, as well as in south Germany, Poland, and Austria: rainy at Munich and Lemberg. Sky clearing later at some of the Irish and Scotch stations; no important change occurring elsewhere.

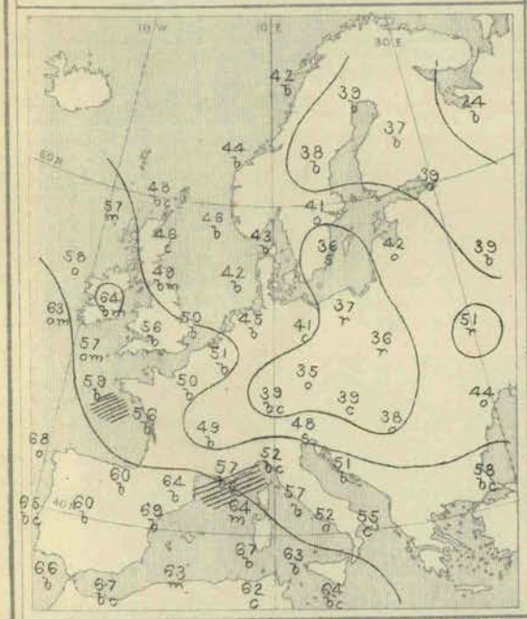
Temperature fallen in many parts of Germany and Austria, as well as in the south of Spain, risen in most other localities. Morning readings highest, 70° at Barcelona, 69° at Corunna and Sfax, 68° at Brindisi, and 67° at Oran and Algiers; above 60° at most of the Mediterranean and Spanish stations, as well as in the extreme south and south-east of England. Lowest, 14° at Archangel, 30° at Uleaborg and Kuopio, 33° at St. Petersburg, and 34° at Breslau and Warsaw, below 40° in many parts of Sweden and Russia. Rising during day to 70° and more over France, Italy, and nearly all the inland parts of the United Kingdom, and to 80° or more in Spain, the highest reading of all being 86° at Corunna. Succeeding night cold over England.

Wind light to moderate from the Eastward or North-Eastward over Denmark, north Germany, the Netherlands, France, Spain, and the extreme south of England; South-Easterly or Southerly in the western and northern parts of the United Kingdom. Calm or variable over the northern parts of Sweden and Russia, Northerly or North-Westerly over Poland, Austria, and Italy; Northerly or North-Easterly in Algeria. No important change occurring during day.

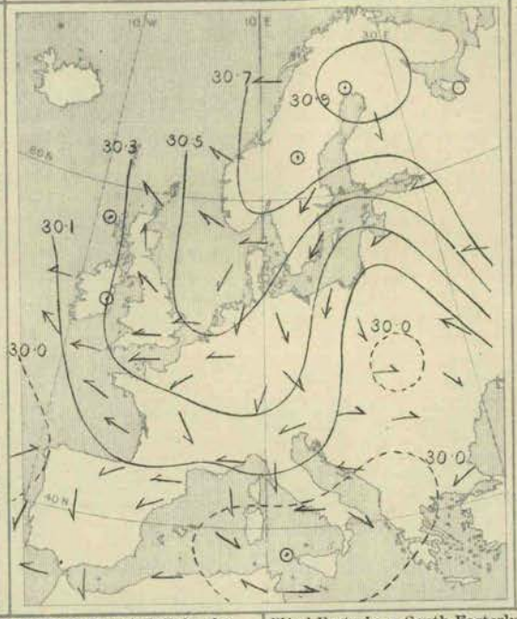
Barometer highest, 30·6 ins. and upwards in Norway; 30·1 ins. and upwards in an anticyclone covering all but the extreme south-eastern and south-western parts of Europe. Lowest, 30·0 ins. and less in a large shallow area lying over Turkey, the Balkan Provinces, and the south of Russia, and also in a smaller system lying off the north-west of Spain. No decided change occurring later, but small depression appearing in evening over the south of Russia.

Saturday, 6th May.

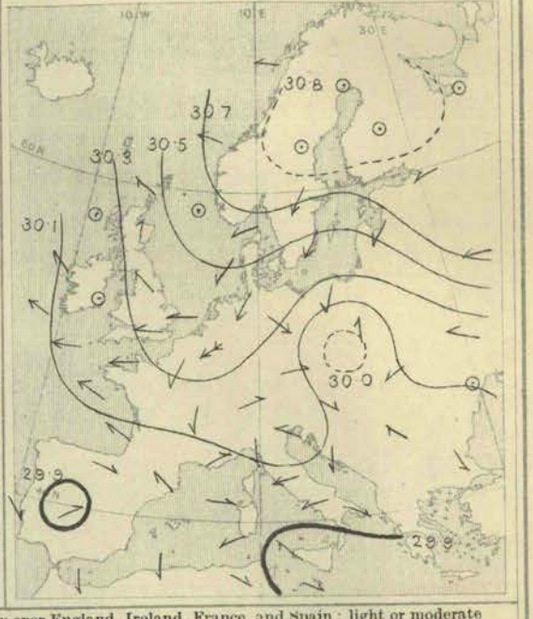
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fine over the greater part of western, northern, and southern Europe, but dull in the extreme west and south-west of our Islands, dull and unsettled at many of the Russian, German, and Austrian stations, with rain at Neufahrwasser and Warsaw, and with snow at Hangö, Helsingfors, Stockholm, Lemberg, and Trieste. Rain falling later in many parts of Germany, and snow at Vienna, but weather remaining very dry over the whole of western and southern Europe.

Temperature risen a little on the eastern shores of the North Sea and also in the northern parts of our Islands and Russia, fallen elsewhere. Morning readings highest, 69° at Barcelona, 68° at Coruna, and 67° at Cagliari, Oran, and Sfax; above 60° over the western and central parts of the Mediterranean generally, and also on some parts of our own west and south-west coasts. Lowest, 24° at Archangel, 33° at Breslau, and 34° at Cracow: below 40° in most parts of central Europe. Rising during day to 65° or more at many of our own inland and southern stations, and reaching 71° at Loughborough and Cambridge. Exceeding 75° in several parts of France and Spain. Frost occurring over central England at night.

Wind Easterly or South-Easterly over England, Ireland, France, and Spain; light or moderate in force generally, but fresh or strong on our extreme west and south-west coasts. Calm over the northern parts of Sweden and Russia; moderate to strong from the North-Eastward over Denmark and the Baltic; North-Westerly in Germany and Westerly in Austria, but South-Easterly in the south of Russia. Easterly or North-Easterly in Spain, Italy, and Algeria. No important change occurring during day.

Barometer highest, 30·9 ins. and upwards in Lapland; 30·1 ins. and upwards in an anticyclone covering all but the southern and south-eastern parts of Europe. Lowest, 30·0 ins. and less in two large shallow areas lying respectively off the Portuguese coasts, and over Turkey, Greece, and the southern parts of Italy, as well as in a rather well-marked depression lying over Galicia. Latter depression subsequently moving slowly westwards to eastern Germany, and gradients for North-Easterly winds becoming rather steep over the Baltic.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are show by arrows, which are drawn flying *with the wind*, the force is indicated thus: ⟫⟶ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breese: and ⊙ = a calm. In the left-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds: o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning: and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Germany, Sweden, and Norway, and 7 a.m. in France, Algeria, Italy, Austria, and Russia; that for 6 p.m. is prepared from observations made at 6 p.m. in the British Islands and France, 7 p.m. in Algeria, 8 p.m. in Sweden and Norway, Germany, and Austria, and 9 p.m. in Russia, Belgium, and Italy. The time indicated in each case is the standard time for each country.

GENERAL NOTES.

The barometrical depressions which spread south-eastwards over the North Sea at the close of the previous week subsequently travelled away to Scandinavia, the Baltic, and northern Europe, and at the commencement of this period an anticyclone advanced from the Atlantic over France and the south of our Islands. On the 2nd, a fresh depression appeared off our extreme west coasts, but this soon passed away to the northward, while a general rise of the barometer took place over nearly the whole of Europe. The last-mentioned change resulted eventually in the formation of a very large anticyclone, the central portion of which lay over the northern parts of Scandinavia and Russia, where the barometer at the close of the week stood at 30·8 ins. and upwards. The cyclonic breezes and variable weather which prevailed in many of the north-western countries at the commencement of the period soon gave place to moderate winds from the Eastward, and fine dry weather, but over eastern and south-eastern Europe the winds were Northerly or North-Westerly, and on the 6th, when a shallow depression advanced from the Black Sea to Poland, heavy falls of rain or snow were experienced in many parts of Germany and Austria.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 104.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	29·6	?	28	?	EASTBOURNE	50·5	?	49	?
OSWALDKIRK (Yorkshire)	37·7	?	36	?	TENBY	59·5*	?	57*	?
WORKSOP	41·4	+ 6·0	39	+ 5	NEWQUAY	53·5	?	52	?
THURCASTON (Leicestershire)	51·0	+ 17·3	49	+ 15	TORQUAY	69·6*	?	68*	?
MARGATE	50·7	?	49	?	ARLEY COTTAGE (County Cavan)	24·7	?	23	?
WESTBOURNE (Sussex)	62·6 *	?	61*	?	GUERNSEY	84·0*	?	82*	?
BRIGHTON	59·9	?	56	?					

* The values at Westbourne, Tenby, Torquay and Guernsey are obtained by Jordan's Photographic Recorder.

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WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; R. H. SCOTT, F.R.S., SECRETARY.

By whom Subscriptions, payable in advance, can be received.

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VOL. X. No. 19.] *Third Series.* WEEK ENDING SATURDAY, 13TH MAY, 1893. [*Price 6d.* [*Annual Subscription, post paid, £1 10s. 0d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871-90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the twenty-five years 1866-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the ten years 1881-90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

	DISTRICTS. (See p. 110.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 1st, 1893. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	71	37	59·6	44·2	51·4	5 above.	66	+27	0	− 7	440	+197	485	− 46
	1. SCOTLAND, EAST	70	31	61·6	43·7	52·1	5 above.	71	+21	0	− 6	506*	+162	548	− 15
	2. ENGLAND, N.E.	73	33	60·5	43·5	51·5	4 above.	67	+18	0	− 3	516*	+192	435*	− 61
	3. ENGLAND, EAST	77	33	63·4	42·3	52·5	3 above.	74	+11	0	− 5	676	+252	524	− 33
	4. MIDLAND COUNTIES	77	30	67·6	40·6	53·3	4 above.	85	+22	4	− 1	784	+332	505	− 43
	5. ENGLAND, SOUTH	77	33	66·0	44·8	54·8	4 above.	90	+21	0	− 2	757	+273	371	− 44
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	69	35	62·5	45·4	53·4	5 above.	80	+27	0	− 3	580	+227	354	− 60
	7. ENGLAND, N.W.	74	31	63·5	44·6	53·5	4 above.	81	+24	0	− 3	661	+298	323	− 90
	8. ENGLAND, S.W.	80	34	66·6	45·1	55·3	5 above.	93	+32	0	− 1	807	+327	246	− 69
	9. IRELAND, NORTH	74	37	63·1	46·8	54·4	5 above.	87	+31	0	− 3	666	+226	258	−102
	10. IRELAND, SOUTH	73	37	64·7	47·0	55·3	5 above.	93	+32	0	− 1	820	+267	178	− 99
	—CHANNEL ISLANDS	73	44	61·9	49·4	55·3	4 above.	93	+26	0	0	942	+372	70	− 52

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 110.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the mean for the Week.	From Jan. 1st, 1893. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 1st, 1893. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in	10ths of in.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	3	5	1 less.	84	− 6	15·7	− 1·9	39	− 9	35	− 8	383	− 10	26	− 1
	1. SCOTLAND, EAST	2	2	3 less.	67	− 5	7·4	− 3·0	54	+ 14	49	+12	494	+ 57	33	+ 3
	2. ENGLAND, N.E.	0	—	4 less.	53	−15	5·5*	− 2·9	65	+ 24	60	+24	574	+190	38	+ 12
	3. ENGLAND, EAST	0	—	4 less.	55	−12	5·3	− 2·7	77	+ 30	73	+28	671	+206	45	+ 14
	4. MIDLAND COUNTIES	0	—	5 less.	53	−11	5·2	− 3·9	79	+ 39	74	+37	651	+238	43	+ 15
	5. ENGLAND, SOUTH	0	—	4 less.	51	−13	6·0	− 3·3	77	+ 38	72	+33	689	+252	46	+ 17
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	1	2	4 less.	68	− 9	11·8	− 6·0	54	+ 11	50	+10	529	+111	36	+ 8
	7. ENGLAND, N.W.	0	—	5 less.	56	−15	7·2	− 3·5	68	+ 26	63	+23	556	+150	37	+ 10
	8. ENGLAND, S.W.	0	—	5 less.	53	−19	9·2	− 4·7	82	+ 35	78	+33	724	+223	48	+ 15
	9. IRELAND, NORTH	0	—	5 less.	69	−12	9·4	− 2·6	50	+ 6	46	+ 6	447	+ 30	30	+ 2
	10. IRELAND, SOUTH	0	—	6 less.	60	−15	10·0	− 4·2	60	+ 15	56	+14	535	+ 47	36	+ 3
	—CHANNEL ISLANDS	0	—	4 less.	59	−19	7·6	− 3·9	92	+ 38	88	+35	811	+215	54	+ 15

Bright Sunshine.—For several of the stations there are no 'mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather was again very dry and fine over England and Ireland, but in Scotland the conditions, after remaining fine during the earlier part of the week, became rather unsettled towards its close and some rain fell.

Temperature continued above the mean, the excess ranging from 3° in England E. to 4° or 5° in the other districts. The highest of the maxima were registered, as a rule, either on the 12th or 13th, and ranged from 80° in England S.W., and 77° over the eastern, southern, and central parts of England, to 70° in Scotland E., and to 69° in Scotland W. The lowest of the minima were recorded during the earlier part of the period, when the thermometer fell to 30° in the Midland Counties, 31° in Scotland E. and England N.W., and to between 33° and 37° in most of the other districts. In the Channel Islands the lowest reading was 44°. During the latter part of the week the minima were much higher, in many cases about 50°.

Rainfall was altogether absent from England and Ireland, but in the east and west of Scotland the fall amounted to two tenths of an inch, and in Scotland N. to five tenths.

Bright Sunshine was extremely abundant, especially over England. The percentage of the possible duration ranged from 35 to 50 in Scotland, from 46 to 56 in Ireland, and from 60 to 78 over England; in the Channel Islands the percentage was as high as 88. The amount of Bright Sunshine recorded for the week in London was equal to 76 per cent. of the possible number of hours, which is higher than any percentage previously recorded in the metropolis since the sunshine instruments were established in 1880.

Barometer and Wind.—The distribution of pressure over our Islands was again mostly anticyclonic and the winds light in force; in direction they were between South-East and North-East during the first few days, but later on, Westerly winds which appeared in the north spread gradually to all parts of the Kingdom.

* This value has been altered slightly owing to the receipt of further information.

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II.—DATA from which the SUMMARY on page 109 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.)								Rainfall.			Bright Sunshine.			
		Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°				Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	58	40	53·6	42·4	47·7	+ 3·5	40	0	3	0·65	+0·25	*	*	*	*
	Stornoway	64	40	57·6	44·4	50·6	+ 4·5	60	0	3	0·32	−0·26	33·4	− 8·7	30	− 8
	Wick	65	40	57·3	43·9	50·2	+ 4·3	57	0	3	0·16	−0·24	*	*	*	*
	Lairg Ⓢ	69	37	62·5	42·0	51·6	+ 5·0	67	0	3	0·50	0·00	*	*	*	*
	Glencarron Ⓢ	70	42	61·9	44·5	52·7	+ 6·5	75	0	3	0·99	−0·03	*	*	*	*
	Fort Augustus Ⓢ	71	38	64·1	45·6	54·3	+ 7·3	86	0	2	0·16	−0·32	38·2	?	34	?
	Fort William Ⓢ	65	41	60·0	46·5	52·9	+ 4·6	76	0	3	0·47	−0·33	46·1	?	42	?
1. SCOTLAND, E.	Nairn	70	36	63·7	42·7	52·6	+ 4·9	74	0	3	0·39	+0·05	*	*	*	*
	Aberdeen	69	40	59·7	45·4	52·1	− 5·0	71	0	3	0·46	−0·01	54·5	+12·8	49	+12
	Braemar Ⓢ	64	31	59·5	40·6	49·5	+ 5·0	58	4	3	0·24	−0·27	53·8†	?†	48†	?†
	Ochtertyre Ⓢ	70	35	65·0	44·0	53·9	+ 7·4	83	0	0	—	−0·55	*	*	*	*
	Leith	64	40	59·3	45·9	52·2	+ 3·6	71	0	1	0·01	−0·39	*	*	*	*
	Marchmont Ⓢ	69	38	62·1	43·6	52·3	+ 6·1	72	0	1	0·02	−0·50	55·5	?	50	?
2. ENGLAND, N.E.	Alnwick Castle	64	34	58·9	43·9	51·0	+ 4·6	63	0	1	0·01	−0·50	*	*	*	*
	Durham	71	33	63·1	41·1	51·4	+ 4·2	70	3	0	0·01‡	−0·44	58·2	+20·6	53	+18
	Shields	66	39	58·0	43·1	50·1	+ 3·0	57	0	0	—	−0·40	*	*	*	*
	Scarborough Ⓜ	70	41	58·5	44·3	51·0	+ 2·9	63	0	0	—	−0·42	*	*	*	*
	York	73	37	67·9	42·1	54·2	+ 5·0	85	0	0	—	−0·43	71·8	+30·7	66	+29
	Spurn Head	65	43	56·4	46·4	51·1	+ 2·8	64	0	0	—	−0·33	*	*	*	*
3. ENGLAND, E.	Hillington Ⓜ	73	37	62·0	42·6	51·7	+ 2·3	68	0	0	—	−0·42	77·4	+31·4	72	+29
	Yarmouth	68	43	56·9	46·6	51·4	+ 2·7	66	0	0	—	−0·42	*	*	*	*
	Geldeston	73	39	61·4	43·2	51·8	+ 2·4	69	0	0	—	−0·40	70·8	+20·7	67	+19
	Cambridge	77	33	69·7	39·9	53·9	+ 3·4	92	6	0	—	−0·42	78·6	+35·3	74	+34
	Rothamsted	75	37	66·9	41·8	53·6	+ 4·3	82	1	0	—	−0·50	81·4	?	77	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	74	30	69·4	38·3	52·9	+ 3·3	92	10	0	—	−0·45	*	*	*	*
	Loughborough	77	32	68·3	39·6	53·1	+ 2·7	88	7	0	—	−0·48	*	*	*	*
	Stamford (Ketton Hall)	74	33	66·6	40·4	52·7	+ 1·9	82	4	0	—	−0·57	*	*	*	*
	Cheadle Ⓜ	72	38	64·9	42·9	53·2	+ 5·1	78	0	0	—	−0·53	*	*	*	*
	Churchstoke Ⓜ	74	34	66·4	38·4	51·6	+ 3·8	82	10	0	—	−0·48	79·3	+39·0	74	+36
	Hereford Ⓜ	75	37	68·7	41·1	54·1	+ 4·0	88	3	0	—	−0·47	*	*	*	*
	Cirencester	74	39	67·6	41·4	53·7	+ 4·6	84	2	0	—	−0·49	84·5	+41·6	80	+39
	Oxford	75	37	69·1	42·4	55·0	+ 4·2	91	0	0	—	−0·45	82·0	+40·0	77	+38
5. ENGLAND, S.	London	76	41	69·9	44·7	56·5	+ 4·6	102	0	0	—	−0·42	80·1†	+40·7†	76†	+38†
	North Foreland	67	45	58·0	47·4	52·4	+ 2·6	73	0	0	—	?	*	*	*	*
	Strathfield Turgiss Ⓜ	77	33	71·4	39·7	54·6	+ 4·0	98	6	1	0·02	−0·39	*	*	*	*
	Dungeness	64	40	60·9	47·1	53·6	+ 2·9	81	0	0	—	−0·40	*	*	*	*
	Hastings (St. Leonards)	66	42	62·7	45·7	53·7	+ 2·5	82	0	0	—	−0·40	76·5	+25·8	72	+24
	Southampton	76	41	72·0	44·6	57·5	+ 5·9	109	0	0	—	−0·48	83·4	+37·4	79	+35
	Hurst Castle	72	44	65·7	47·9	56·3	+ 5·6	100	0	0	—	−0·40	*	*	*	*
	Stowell Ⓜ	75	38	67·6	41·4	53·7	+ 4·2	84	2	0	—	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	69	46	64·4	47·3	55·3	+ 6·6	93	0	3	0·98	+0·10	*	*	*	*
	Glasgow	66	43	60·9	46·6	53·3	+ 4·8	79	0	2	0·07	−0·46	42·5	+ 6·6	39	+ 7
	Ardrossan	68	43	60·3	45·6	52·5	+ 3·0	74	0	1	0·01	−0·51	*	*	*	*
	Glenlee Ⓢ	69	35	64·3	41·7	52·2	+ 4·7	73	1	1	0·01	−0·66	*	*	*	*
	Douglas (Isle of Man)	66	40	62·5	45·8	53·7	+ 5·0	82	0	0	—	−0·50	65·2	+15·2	60	+13
7. ENGLAND, N.W.	Newton Reigny	71	31	64·9	39·6	51·5	+ 5·1	77	7	0	—	−0·47	61·5	+17·8	56	+16
	Stonyhurst	68	40	63·3	43·2	52·7	+ 3·5	75	0	0	—	−0·59	71·9	+30·0	66	+27
	Blackpool Ⓜ	68	41	63·4	44·9	53·6	+ 4·1	81	0	0	—	−0·43	72·5	+28·2	66	+25
	Manchester	74	40	65·0	43·6	53·7	+ 4·8	82	0	0	—	−0·51	65·4†	?	61†	?
	Liverpool Obsy. (Bidston)	73	42	64·3	46·1	54·7	+ 4·7	89	0	0	—	−0·40	*	*	*	*
	Llandudno Ⓜ	67	42	63·3	47·9	55·1	+ 4·7	92	0	0	—	−0·42	69·3	+27·1	65	+25
	Holyhead	65	43	60·4	47·0	53·3	+ 3·4	79	0	0	—	−0·44	*	*	*	*
8. ENGLAND, S.W.	Llandovery	80	34	72·1	40·4	55·3	+ 5.9	100	4	0	—	−0·64	*	*	*	*
	Pembroke	66	43	61·4	48·1	54·4	+ 4·9	87	0	0	0·02‡	−0·43	70·2	+21·8	66	+21
	Bristol (Montpelier)	78	40	71·5	43·4	56·6	+ 6·2	102	0	0	—	?	*	*	*	*
	Arlington (N. Devon)	74	33	66·1	42·9	53·7	+ 5·0	82	0	0	—	−0·66	*	*	*	*
	Cullompton Ⓜ	74	39	68·7	41·7	54·8	+ 4·8	91	1	0	—	−0·50	88·1	+46·7	83	+44
	Falmouth	69	48	62·9	48·4	55·2	+ 4·3	92	0	0	—	−0·64	83·2	+35·8	79	+34
	Plymouth	71	44	66·6	47·5	56·6	+ 4·4	102	0	0	—	−0·48	83·4	+37·8	79	+35
	Prawle Point	70	44	63·7	48·3	55·5	+ 5·8	95	0	0	—	−0·39	*	*	*	*
9. IRELAND, N.	Malin Head	66	46	59·4	49·7	54·3	+ 4·5	86	0	1	0·01	?	*	*	*	*
	Londonderry	73	42	66·4	47·2	56·2	+ 6·0	99	0	0	—	−0·52	*	*	*	*
	Edenfel (Omagh)	70	41	64·7	46·3	55·0	+ 6·6	91	0	0	—	−0·50	*	*	*	*
	Belmullet	63	45	60·1	48·7	54·1	+ 2·9	85	0	2	0·06	?	*	*	*	*
	Markree Castle	69	37	64·2	45·0	54·0	+ 5·4	84	0	0	—	−0·48	44·1	+ 2·4	40	+ 1
	Brookeborough	71	40	65·2	45·7	55·0	+ 6·8	91	0	0	—	−0·57	*	*	*	*
	Armagh	68	39	62·0	43·2	52·0	+ 3·1	70	0	0	—	−0·48	51·3	+10·5	47	+ 9
	Donaghadee	67	49	60·1	51·6	55·6	+ 6·7	95	0	0	—	−0·51	*	*	*	*
	Edgeworthstown	74	41	65·6	43·4	53·8	+ 5·3	83	0	0	—	−0·53	*	*	*	*
10. IRELAND, S.	Dublin	70	47	63·5	49·2	55·9	+ 5·3	97	0	0	—	−0·45	65·8	+18·8	61	+17
	Parsonstown	73	39	66·9	44·3	54·9	+ 5·5	99	0	0	—	−0·50	53·6	+11·3	50	+10
	Kilkenny	73	39	66·9	45·1	55·4	+ 5·4	94	0	0	—	−0·45	*	*	*	*
	Waterford	70	41	65·7	46·1	55·3	+ 4·3	93	0	0	—	−0·54	*	*	*	*
	Roche's Point	65	48	61·0	49·7	55·0	+ 3·6	91	0	0	—	−0·71	*	*	*	*
	Valencia	69	43	63·1	48·1	55·2	+ 4·2	92	0	1	0·01	−0·76	61·2	+14·5	58	+14
	Killarney	70	37	65·6	45·6	55·0	+ 4·6	91	0	*0	—	?	*	*	*	*
	Foynes	70	42	65·2	47·7	55·9	+ 5·4	97	0	0	—	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	62	46	59·1	50·0	54·3	+ 2·9	86	0	0	—	−0·42	*	*	*	*
	Jersey	73	44	64·7	48·7	56·2	+ 4·0	99	0	0	—	−0·43	90·9	+37·9	87	+35

Stations marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row) at the Kew Observatory, and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

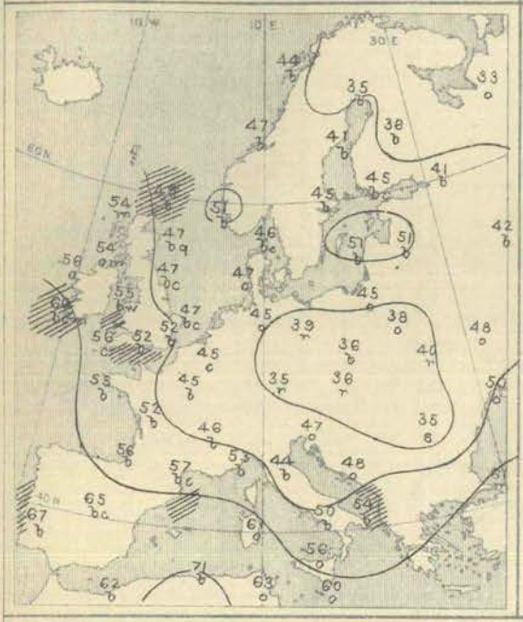
‡ Dew or Fog.

ERRATUM.—The number of hours of Bright Sunshine at Jersey in last week's Report should read "80·5" instead of "18·5."

Sunday, 7th May.

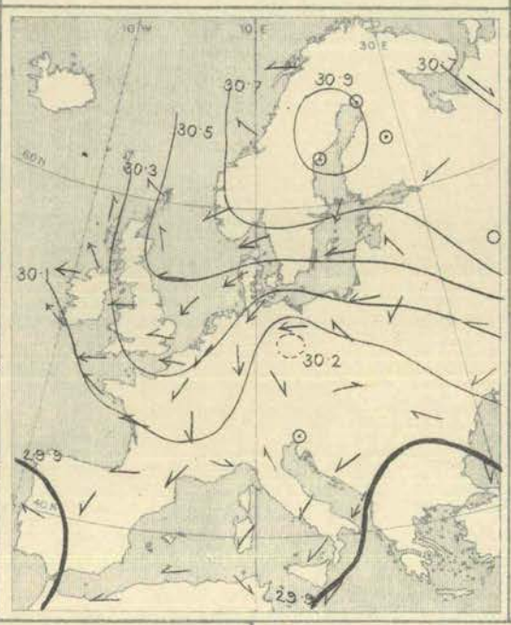
Temperature and Weather.

8 a.m.

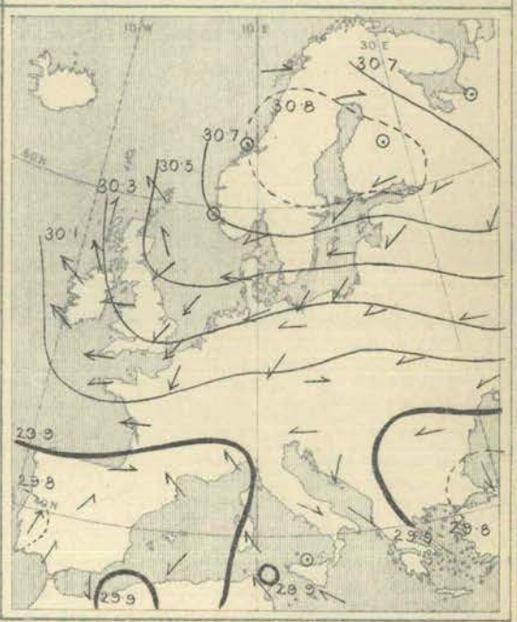


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning fine, bright, and dry over the whole of western and northern Europe, dull over central and south-eastern Europe, with snow at Hermanstadt, Cracow, and Prague, rain at Lemberg, Vienna, Munich, Wiesbaden, and Berlin. Some rain later at the German stations generally, and in the Netherlands, and a large quantity at Lisbon, in the Azores, and at Constantinople; much snow at Hermanstadt. Weather over western Europe remaining dry.

Temperature highest, 60° to 71° over the southern half of the Mediterranean and on the Spanish coasts, 60° at Valencia (Ireland); below 50° over the north-eastern and eastern counties of Great Britain and France, and below 40° over central Europe. Lowest, 33° at Archangel, 35° at Munich and Cracow, 36° at Vienna and Breslau. Rising later to 60° or a little more in many parts of England and Ireland, to 64° at Stornoway, to 73° at Brest, 77° at Biarritz, Lisbon, and Algiers, to 80° and more over Tunis, and to 95° at Biskra. Not touching 70° at any Italian station.

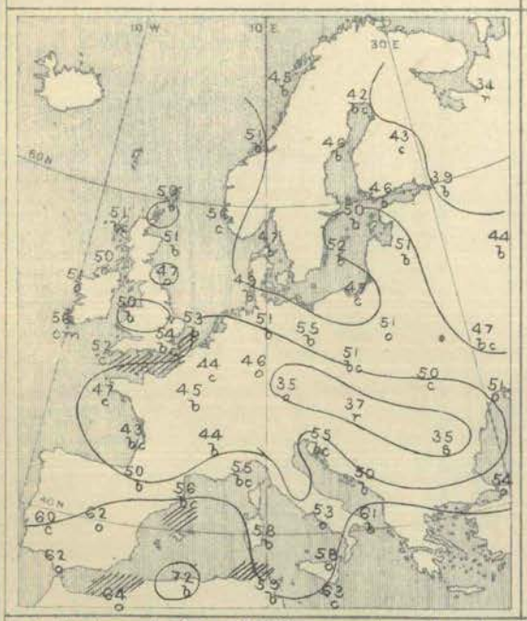
Wind Easterly, moderate to strong, over the Baltic, North-Easterly, strong to a gale, on the eastern shores of the North Sea, Easterly, fresh to strong, on our south and south-west coasts, South-Easterly, strong, on the Irish coasts, and rather more Southerly in Scotland. No important change later except in the south-east of our area, where it became squally during the day, and blew a gale at the Helder and North Foreland.

Barometer highest, 30·9 ins. and more to 30·5 ins. over the whole of northern Europe, and exceeding 30·1 ins. over north-western Europe, north Germany, and the whole of Russia. Lowest, 29·9 ins. and less in two large areas, one over south-eastern Europe, the other over the south-western parts of the Spanish Peninsula and adjacent parts of the Atlantic. Gradients not steep anywhere. Falling somewhat over France and the south-east of England later, and over the Balkan Peninsula, also in the extreme north and north-east of Russia.

Monday, 8th May.

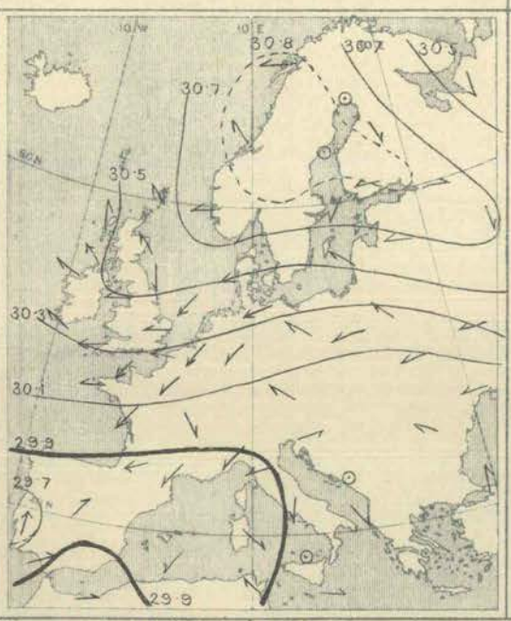
Temperature and Weather.

8 a.m.

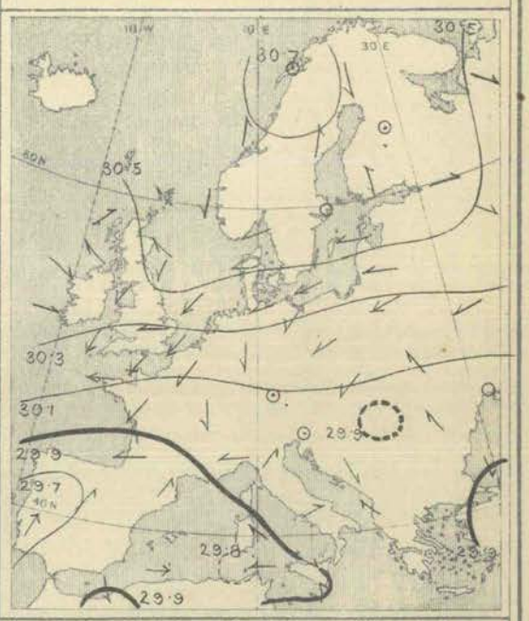


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning fine and bright over western and northern Europe, except at Archangel, temporarily dull at a few of our own stations, very dull and unsettled over south-western Europe, with rain at some of the Austrian stations, snow at Hermanstadt, cloudy and unsettled over Spain, rainy at Turin (newspapers report cold wet weather over Switzerland and frost at Paris). Rainfall later, 0·9 in. at Odessa, 0·7 in. at Lisbon, 0·6 in. at Nicolaieff, Hermanstadt, and Buda-Pesth, 0·04 in. at Wiesbaden, none over our Islands or north-western Europe.

Temperature becoming irregularly distributed. Readings in morning, 72° at Algiers, 70° at Oran, exceeding 60° at several stations on the southern and western sides of the Mediterranean, and exceeding 50° at those on the northern side, as well as in many parts of our Islands, and the Baltic Provinces. Lowest, (1) 34° at Archangel, 38° at Uleaborg, 39° at St. Petersburg; (2) 35° at Munich and Hermanstadt, 37° at Vienna, 41° at Turin, 47° at Pesaro, 50° at Lesina and Rome. Rising to between 60° and 67° at most of our own stations during day, to 64° at Paris and Perpignan, 70° at Biarritz, 72° at Palermo, 84° at Tunis, and 108° at Biskra.

Wind calm or nearly so over northern Europe; Easterly and North-Easterly, light to fresh over the Baltic, fresh to strong over the North Sea, the Channel, and Bay of Biscay; East-South-Easterly in Ireland, Southerly, moderate, in Scotland, North-Easterly to Northerly breezes on the northern shores of the Mediterranean, South-Westerly over the southern half of Spain. Blowing a moderate gale from North-East at some German stations later. Remaining little changed elsewhere.

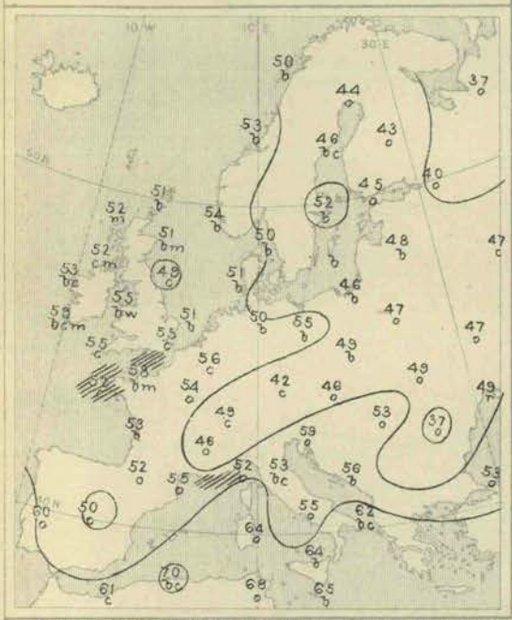
Barometer highest, 30·8 ins. and more to 30·5 ins. over northern Europe, including Scotland and the northern parts of the German Ocean. Lowest, 29·8 ins. to 29·6 ins. in a depression over the Peninsula and adjacent parts of Atlantic; 29·8 ins. and less in two others—one over Algeria, the other over south-eastern Europe. Gradients somewhat steep over the western and central countries, moderate to slight both in the south and in the far north. Falling a little over Scandinavia later, rising slightly in Ireland: depression over south-eastern Europe becoming shallower.

Judd & Co Ltd, Lith 63, Carter Lane,

Tuesday, 9th May.

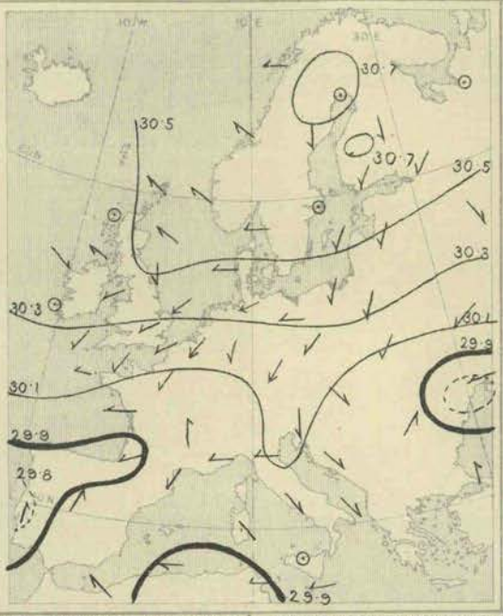
Temperature and Weather.

8 a.m.

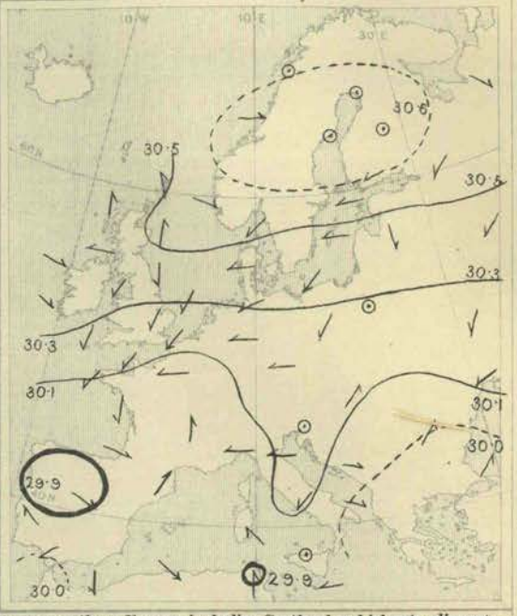


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning still fine and bright over the British Isles, the North Sea, Germany, and the Bay of Biscay, but dull over a great deal of France, and dull and unsettled over the greater part of southern Europe, rain falling at Cape Sicié and also on the northern side of the Black Sea. Considerable falls of rain over the southern, eastern, and central parts of France later, as well as south Germany and the south of Russia, smaller quantity at Oporto. Weather remaining fine and bright over the British Isles and north-western Europe, but sky looking very unsettled over the south-east of England during afternoon.

Temperature in morning highest, 72° at Sfax, 70° at Algiers, and exceeding 60° on the southern side of the Mediterranean generally; exceeding 50° all over southern and western Europe. Lowest, 37° at Archangel, 40° at St. Petersburg, and below 50° over Russia, Finland, and the northern half of Sweden, as well as at Shields and Leith. Rising later to between 65° and 70° over the greater part of England and Ireland, to 68° at Berlin, Brussels, and Lorient, exceeding 70° in several parts of Italy, and touching 87° in some parts of Algeria; not exceeding 62° at Paris, Nice, or Perpignan.

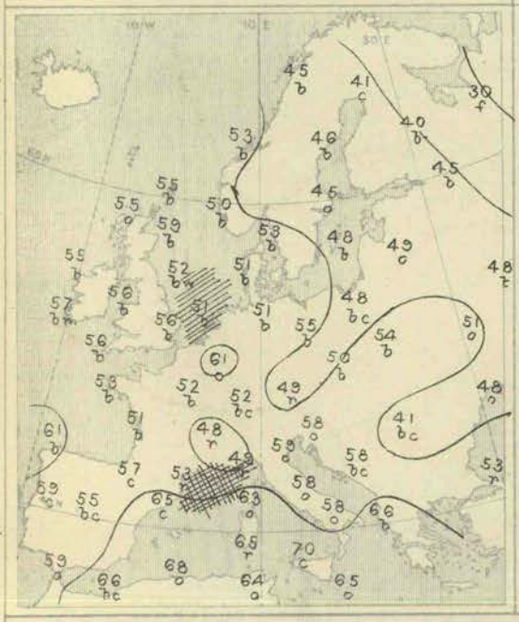
Wind very light and anticyclonic over northern Europe, including Scotland and islands adjacent, light to moderate from the North-Eastward over the Baltic, fresh from the same quarter over the southern half of the North Sea, the English Channel, and the Bay of Biscay, moderate Easterly on our western coasts; very variable over south-eastern and southern Europe and the Mediterranean. Freshening considerably and becoming gusty over London later, and backing to North-North-East; Southerly airs setting in over the Hebrides, but Southerly current failing over Algeria and southern parts of Spain.

Barometer highest, 30·7 ins. and more to 30·5 ins. in an anticyclone still lying over northern Europe and the northern half of the German Ocean. Lowest, 29·8 ins. and less in two depressions—one lying over the Atlantic near Lisbon, the other over the Black Sea and south of Russia; 29·9 ins. and less in another very shallow system over Tunis and eastern Algeria. Falling over Scotland, England, France, and Scandinavia later, and all the disturbances in the far south and south-east filling up.

Wednesday, 10th May.

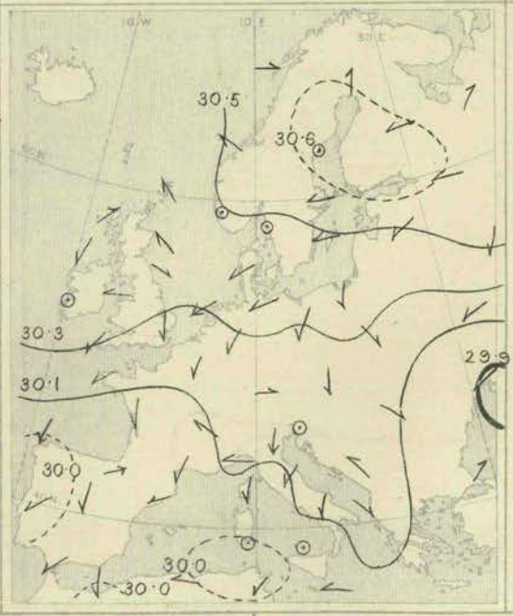
Temperature and Weather.

8 a.m.

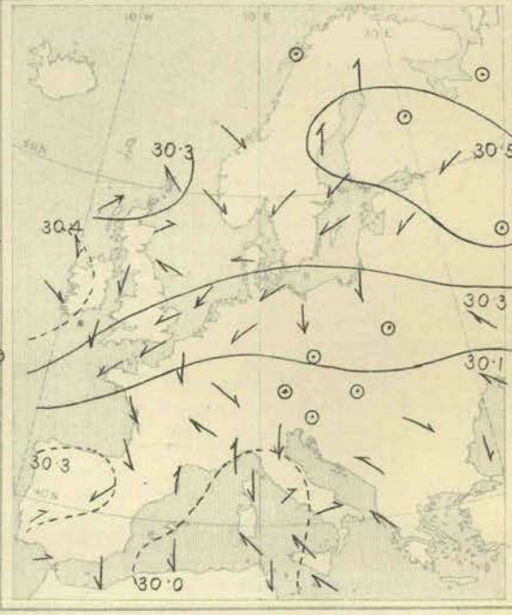


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning still dull and unsettled over south-eastern and southern Europe, with rain in several places, dull in the Hebrides also, but fine and bright over western, central, and northern Europe generally. A little rain over Scotland later, and a considerable fall in the Shetlands; solar halos seen at Aberdeen and Holyhead. Some rainfall over the Azores, the southern parts of France, Germany, and Russia, but conditions elsewhere very fine and dry.

Temperature in morning highest, exceeding 70° at Sfax only; exceeding 60° over the southern half of the Mediterranean, as well as at Brussels and Wick, and exceeding 50° almost all over western and north-western Europe. Lowest, 30° at Archangel, 40° at Kuopio, 41° at Haparanda and Helsingfors, 45° at Swinemunde. Rising later to between 65° and 72° over a great deal of England, France, Belgium, and Germany, to between 70° and 77° over Italy, and to between 90° and 96° over central Algeria. Succeeding night cold (below 40°) at several of the English inland stations—as low as 32° at Loughborough.

Wind still blowing from the North-Eastward (North to East) over the greater part of Europe, but less strong over the Channel, the North Sea, and Netherlands, than of late; light to moderate breezes from between South and South-West appearing on our extreme north and north-west coasts, calms prevailing over many parts of Ireland. Freshening considerably in the north-west of Scotland later, but no change of importance elsewhere.

Barometer highest, 30·6 ins. and more to 30·3 ins. over the northern half of Europe, including the British Isles. Lowest, 29·9 ins. and less in a small depression over the northern side of the Black Sea, and below 30·0 ins. in two others—one over eastern Algeria, the other off the south-west coast of Portugal. Falling over Scotland and northern Europe later, but no material change reported elsewhere.

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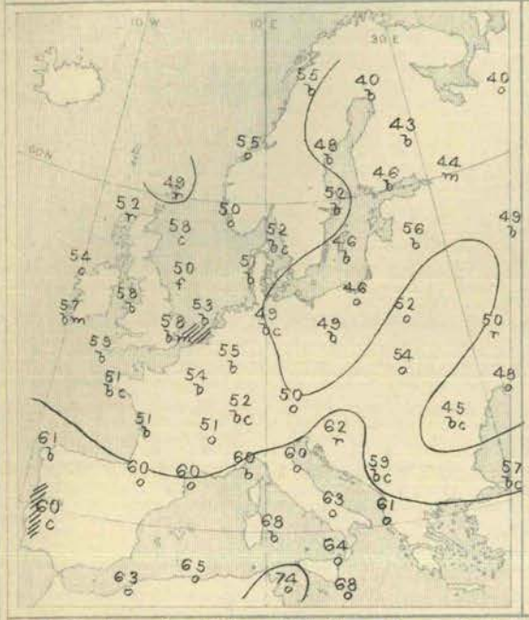
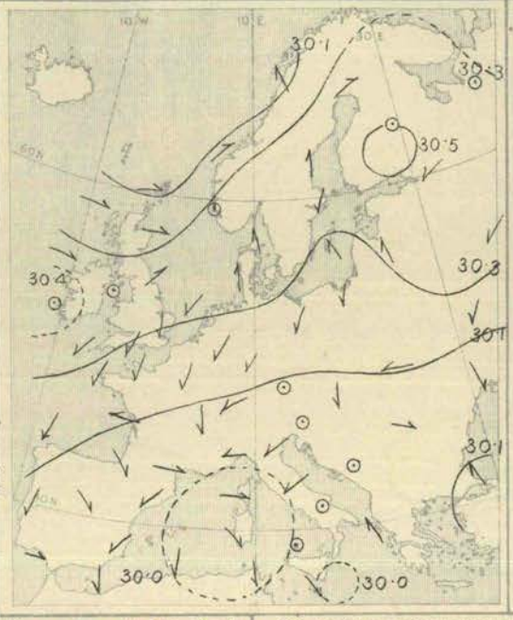
Thursday, 11th May.

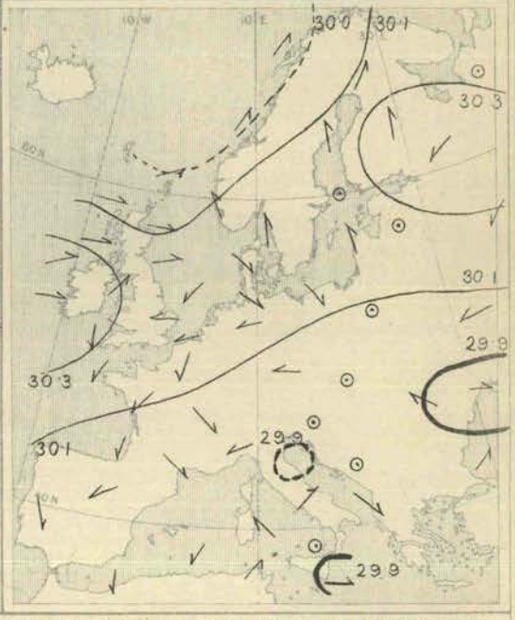
Temperature and Weather. — 8 a.m.



Barometer and Wind. — 8 a.m.



Barometer and Wind. — 6 p.m.



Weather in morning still fine and bright over France, England, the greater part of the North Sea, Scandinavia, the Baltic, western and central Russia; dull over the extreme north-western countries, with rain in the Shetlands and Hebrides, dull over southern and south-eastern Europe also, with rain over the southern parts of Russia. Some rain later in both these regions of unsettled weather, but amounts not large; weather continuing fine elsewhere.

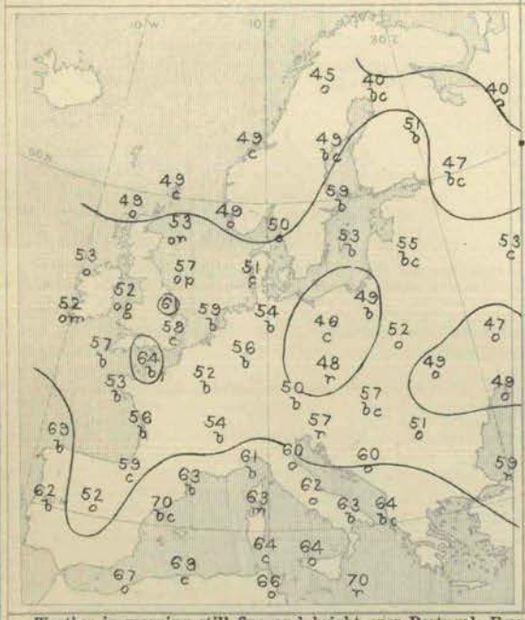
Temperature in morning highest, 74° at Tunis, and exceeding 60° on the southern coasts of Europe generally, and exceeding 50° over western and central Europe. Lowest, 40° at Haparanda and Archangel, and below 50° over northern, central, and southern Russia. Rising later to between 70° and 74° in many parts of our Islands, France, and Spain, to 76° at Paris and Palermo, 77° at Rome and La Calle, to 86° at Tunis and Sfax, and to 93° at Biskra. Succeeding night milder over our Islands than of late.

Wind light to moderate from the Westward over the northern parts of our Islands, very light from between South-West and South over Scandinavia, light from South-East over the Baltic and Finland; Easterly over Germany, North-Easterly over the Netherlands, France, and the southern parts of England, and northern parts of Italy, North-Westerly to Northerly over Spain and the Mediterranean. The Westerly wind in Scotland and the Southerly over Scandinavia both freshening a little later, no very decided change elsewhere.

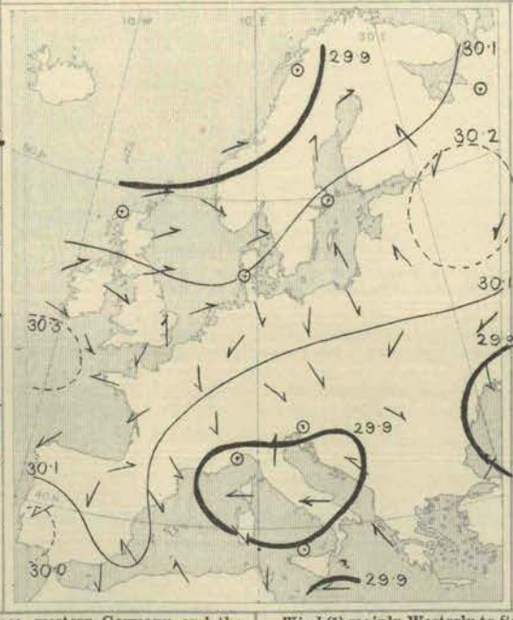
Barometer highest, 30·5 ins. and more to 30·4 ins. over Finland and central Russia, 30·4 ins. and more over the south-west of Ireland and adjacent parts of the Atlantic; and exceeding 30·3 ins. in a "col" stretching from Ireland across England, the North Sea, Denmark, and the south of Sweden to Russia; exceeding 30·1 ins. over Asia Minor. Lowest, 30·1 ins. and less off the north-west of Norway and north of the Shetlands, and 30·0 ins. and less over the Baltic and southern Russia. Giving way slowly in all districts later, but change not very decided.

Friday, 12th May.

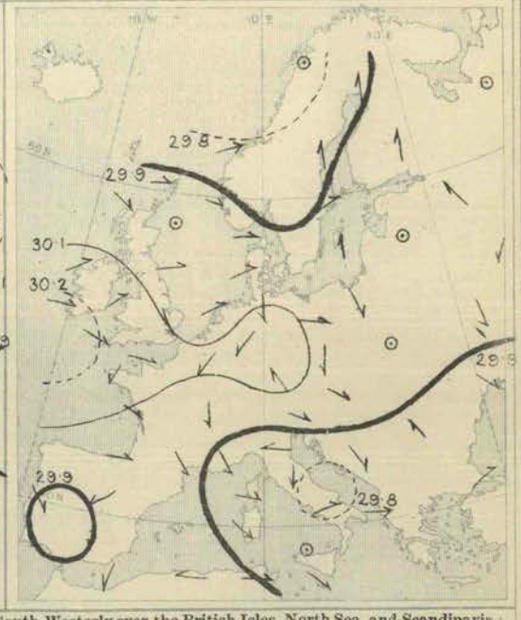
Temperature and Weather. — 8 a.m.



Barometer and Wind. — 8 a.m.



Barometer and Wind. — 6 p.m.



Weather in morning still fine and bright over Portugal, France, western Germany, and the southern counties of England, also over Finland, Sweden, the Baltic, and the greater part of north Germany; very cloudy and unsettled over Norway and the northern parts of our Islands, with rain in several places, and similarly unsettled over south-eastern Europe generally, with continuous rain in south of Russia. Rain later at nearly all the northern stations, also at Funchal, Perpignan, Wiesbaden, and in the south of Austria: much wet fog at the mouth of St. George's Channel; a good deal of cloud prevalent over England.

Temperature rising steadily over England, the Baltic, and northern half of Russia. Morning readings highest, 60° to 72° over the Mediterranean and on the Spanish coasts, 53° to 61° over Ireland, England, France, and western Germany. Lowest, 40° at Archangel and Haparanda, 43° at Hangö, 45° at Bodö, 47° at St. Petersburg, Kharkov, Kiev, and Wick. Rising later to between 70° and 77° over many parts of England, France, Spain, and the south of Italy, and to more than 90° over central Algeria; failing to reach 60° at the bulk of the Irish and Scotch stations.

Wind (1) mainly Westerly to South-Westerly over the British Isles, North Sea, and Scandinavia; (2) North-Easterly over France and Spain; (3) South-Easterly to Southerly over the Baltic, Finland, and Sweden; light to moderate in force generally, nearly calm over Scotland. No decided change later.

Barometer highest, 30·2 ins. and more (1) over the south of our Islands the north of France, and the Netherlands, (2) over the western half of Russia; exceeding 30·1 ins. over the Baltic and north Germany. Lowest, 29·9 ins. and less (1) off the north-west of Norway and the north of the Shetlands, (2) over southern Russia and the Black Sea, (3) over northern Italy, Corsica, and Sardinia, (4) over Malta and adjacent regions to southward thereof; 30·0 ins. and less over the south-west of Spain and Morocco. Falling a little in most places later.

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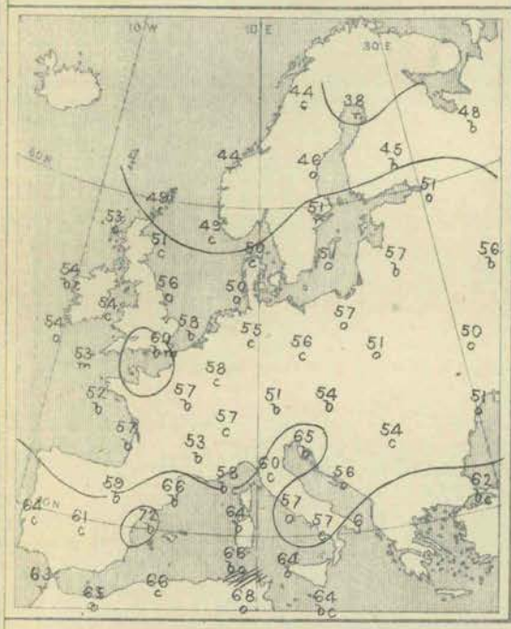
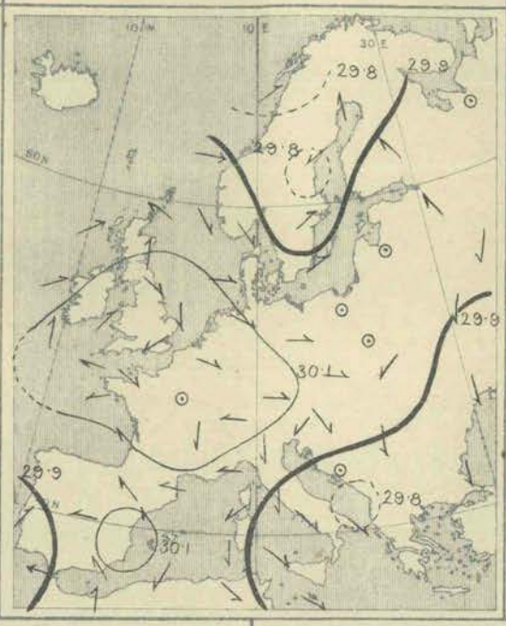
Saturday, 13th May.

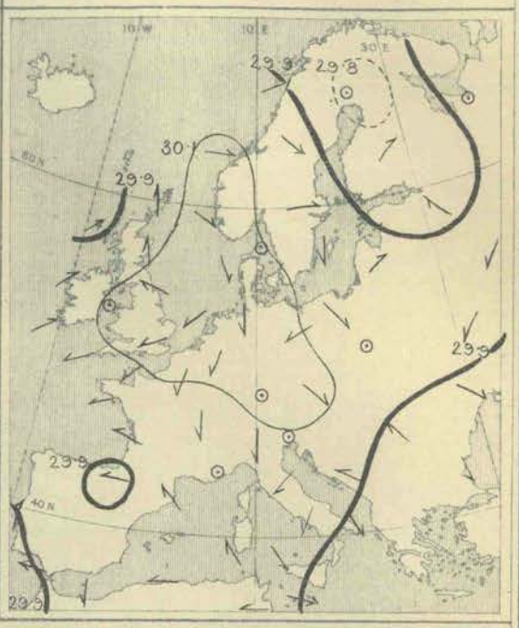
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine generally over the Mediterranean, France, Austria, Germany, and England, and, at most stations in those regions, clear and bright; cloudy or overcast over the northern and south-eastern parts of Europe, the south-western parts of the Peninsula, and the south of Ireland, with rain in places. Some rain falling later over Denmark, Sweden, and Finland, and also over the south of Russia and south-eastern Europe generally, as well as over the southern parts of Spain and Portugal.

Temperature in morning highest, 60° to 70° on the shores of the Mediterranean and on the Portuguese coasts, and exceeding 50° except over the most northern countries and at Kharkov. Lowest, 38° at Haparanda, 44° to 49° over Lapland and Finland generally, and 43° at Kharkov. Rising later to between 70° and 77° over many parts of Great Britain, to 77° at Paris, 81° at Brest, 84° at Biarritz, and 85° at Biskra, failing to reach 80° over Italy or Austria, but touching 70° at St. Petersburg.

Wind light to moderate in force generally. Chiefly Northerly to Easterly over the southern and western countries, Southerly in Ireland and Scotland, South-Westerly to Westerly over Scandinavia, South-Easterly over Finland. Locally North-Easterly at Hernösand, very variable over central, eastern, and south-eastern Europe. Northerly wind becoming strongish over Italy later, the Southerly wind freshening at our northern stations and veering a little, and the Northerly wind becoming more general over Sweden.

Barometer highest, 30·1 ins. and more in a well-marked anticyclone covering Ireland, England, and the greater part of the North Sea, France, and Germany, its central part being directly over England. Lowest, 29·7 ins. and less over Finmark and in a small depression over the Gulf of Bothnia; 29·9 ins. and less over south-eastern Europe and the adjacent parts of the Mediterranean, and also over the south of Portugal and the adjacent parts of the Atlantic. All the systems moving north-eastwards or eastwards later, and pressure giving way rather decidedly over the south-west of France.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are show by arrows, which are drawn flying *with the wind*, the force is indicated thus : ⇛ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breese: and ⊙ = a calm. In the left-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds: o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Germany, Sweden, and Norway, and 7 a.m. in France, Algeria, Italy, Austria, and Russia; that for 6 p.m. is prepared from observations made at 6 p.m. in the British Islands and France, 7 p.m. in Algeria, 8 p.m. in Sweden and Norway, Germany, and Austria, and 9 p.m. in Russia, Belgium, and Italy. The time indicated in each case is the standard time for each country.

GENERAL NOTES.

During the greater part of this week a large anticyclone continued to cover the northern countries of Europe, while shallow depressions lay over Algeria, the Mediterranean, and southern Europe. Easterly winds and fine weather were consequently prevalent in most places, but rain fell in considerable quantities in the extreme south-east and south.

On Thursday, the anticyclone had broken up into two parts, and was moving southwards so that Southerly to Westerly breezes were beginning to spread over northern Europe, while Easterly breezes still held in the south. This tendency continued in force until Friday; on Saturday it had ceased, and a new anticyclone advanced over the British Islands and France from the Atlantic, and at the close of the week was travelling north-eastwards across the North Sea.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 110.

Stations.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	Stations.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	51·4	?	47	?	EASTBOURNE	73·4	?	69	?
OSWALDKIRK (Yorkshire)	65·2	?	60	?	TENBY	86·0*	?	81*	?
WORKSOP	72·2	+33·7	67	+ 32	NEWQUAY	81·5	?	78	?
THURCASTON (Leicestershire)	77·6	+40·6	73	+ 38	TORQUAY	83·2*	?	79*	?
MARGATE	63·5	?	60	?	ARLEY COTTAGE (County Cavan)	54·8	?	50	?
WESTBOURNE (Sussex)	86·5 *	?	82*	?	GUERNSEY	92·3*	?	89*	?
BRIGHTON	73·6	?	69	?					

* The values at Westbourne, Tenby, Torquay and Guernsey are obtained by Jordan's Photographic Recorder.

Judd & Co Ltd, Lith 63, Carter Lane.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; R. H. SCOTT, F.R.S., SECRETARY.

By whom Subscriptions, payable in advance, can be received.

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VOL. X. No. 20.] *Third Series.* WEEK ENDING SATURDAY, 20TH MAY, 1893. [*Price 6d.* *Annual Subscription, post paid*, £1 10*s.* 0*d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871-90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the twenty-five years 1866-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the ten years 1881-90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

	DISTRICTS. (See p. 116.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 1st, 1893. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	69	40	57·9	45·7	51·4	4 above.	66	+22	0	− 5	506	+223	485	− 52
	1. SCOTLAND, EAST	76	38	59·4	45·2	51·8	4 above.	69	+12	0	− 4	575	+180	548	− 19
	2. ENGLAND, N.E.	76	41	59·7	46·5	52·7	4 above.	75	+19	0	− 3	591	+212	438*	− 62
	3. ENGLAND, EAST	80	44	66·2	48·4	56·8	6 above.	104	+32	0	− 3	780	+289	524	− 36
	4. MIDLAND COUNTIES	77	42	65·4	48·6	56·5	6 above.	102	+31	0	− 3	886	+366	505	− 45
	5. ENGLAND, SOUTH	77	43	65·5	51·3	58·0	6 above.	112	+35	0	− 1	869	+310	373*	− 43
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	72	42	60·9	48·2	54·2	5 above.	85	+25	0	− 1	665	+256	354	− 62
	7. ENGLAND, N.W.	76	44	63·3	50·0	56·3	6 above.	100	+36	0	− 1	761	+338	323	− 91
	8. ENGLAND, S.W.	77	45	62·8	51·6	56·9	6 above.	104	+37	0	0	911	+366	246	− 70
	9. IRELAND, NORTH	73	44	62·5	49·9	55·8	6 above.	97	+35	0	− 1	763	+268	258	−104
	10. IRELAND, SOUTH	72	39	62·4	50·7	56·2	5 above.	99	+31	0	0	919	+303	178	− 99
	—CHANNEL ISLANDS	75	50	62·2	52·4	57·0	4 above.	105	+30	0	0	1047	+404	70	− 52

Rainfall.

	DISTRICTS. (See p. 116.)	For the Week. Number of Rainy Days.	Total Fall.	More or less than the mean for the Week.	From Jan. 1st, 1893. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	3	4	2 less.	87	− 8	16·1	− 2·1
	1. SCOTLAND, EAST	3	5	0 (average)	70	− 6	7·9	− 3·0
	2. ENGLAND, N.E.	5	10	6 more.	58	−13	6·3	− 2·3
	3. ENGLAND, EAST	3	4	0 (average)	58	−12	5·7	− 2·7
	4. MIDLAND COUNTIES	6	15	10 more.	59	− 8	6·7	− 2·9
	5. ENGLAND, SOUTH	5	6	2 more.	56	−11	6·6	− 3·1
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	5	14	8 more.	73	− 8	13·2	− 5·3
	7. ENGLAND, N.W.	6	12	8 more.	62	−12	8·4	− 2·8
	8. ENGLAND, S.W.	6	13	8 more.	59	−16	10·5	− 3·9
	9. IRELAND, NORTH	5	7	2 more.	74	−12	10·1	− 2·4
	10. IRELAND, SOUTH	5	12	6 more.	65	−15	11·2	− 3·5
	—CHANNEL ISLANDS	6	12	8 more.	65	−17	8·8	− 3·2

Bright Sunshine.

	DISTRICTS. (See p. 116.)	For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 1st, 1893. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	25	− 1	22	− 2	408	− 24	26	− 1
	1. SCOTLAND, EAST	21	− 24	19	−21	515	+ 35	32	+ 2
	2. ENGLAND, N.E.	26	− 19	23	−15	600	+172	37	+ 10
	3. ENGLAND, EAST	40	− 4	37	− 4	711	+201	44	+ 12
	4. MIDLAND COUNTIES	24	− 18	22	−16	675	+221	42	+ 13
	5. ENGLAND, SOUTH	37	− 12	35	−11	726	+244	45	+ 15
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	18	− 26	16	−23	547	+ 87	34	+ 5
	7. ENGLAND, N.W.	18	− 27	16	−24	574	+123	36	+ 8
	8. ENGLAND, S.W.	26	− 20	25	−18	750	+200	46	+ 12
	9. IRELAND, NORTH	26	− 13	23	−12	473	+ 15	29	0
	10. IRELAND, SOUTH	33	− 12	30	−12	568	+ 35	35	+ 2
	—CHANNEL ISLANDS	28	− 33	26	−31	839	+186	52	+ 12

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather during this period differed very materially from that experienced for many weeks past. Soon after the commencement of the week the sky became cloudy or overcast, and rain set in over the entire Kingdom, with occasional thunder and lightning in most districts.

Temperature continued above the mean, the excess ranging from 4° in the northern districts and in the Channel Islands, to 6° in most parts of England and in Ireland N. The highest of the maxima, which were recorded either on the 14th or 15th, varied from 80° in England E., and 77° over southern, central, and south-western England, to 69° in Scotland N. The lowest of the minima (which were also registered during the earlier part of the week) ranged from 38° in Scotland E. and 39° in Ireland S., to 45° in England S.W., and to 50° in the Channel Islands.

Rainfall was rather less than the mean in Scotland N., and just equal to it in Scotland E. and England E.; in all other districts, however, the normal was exceeded, the excess in most cases being considerable. Over the south and south-east of England the fall was very unequally distributed, in some localities being heavy, and in others slight.

Bright Sunshine showed a very decided decrease on that reported of late, and was below the mean in all districts. The percentage of the possible duration ranged from 37 in England E. and 35 in England S., to 19 in Scotland E. and 16 in England N.W. and Scotland W.

Barometer and Wind.—Barometric pressure over the United Kingdom and its immediate neighbourhood was much lower generally than it had been for many weeks, and was influenced by depressions which spread or travelled slowly over us from the Atlantic. During the earlier part of the week the wind was from between South-East and North-East, but later on it gradually shifted to the Southward and South-Westward. In force it was mainly moderate or light, but blew strongly on some parts of our southern coasts at the end of the week.

* This value has been altered slightly owing to additional information for a preceding week.

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II.—DATA from which the SUMMARY on page 115 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°				Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head ℑ	55	40	52·1	42·3	46·9	+1·9	34	0	3	0·29	−0·11	*	*	*	*
	Stornoway	61	45	57·3	46·9	51·8	+4·9	69	0	3	0·06	−0·54	41·1	− 0·9	35	− 2
	Wick	61	43	55·3	45·0	49·8	+2·9	55	0	1	0·33	−0·06	*	*	*	*
	Lairg ℑ	67	42	59·4	44·4	51·5	+3·6	67	0	3	0·18	−0·31	*	*	*	*
	Glencarron ℑ	64	44	60·5	46·2	52·9	+5·6	76	0	3	0·85	−0·21	*	*	*	*
	Fort Augustus ℑ	69	44	58·9	46·9	52·5	+4·6	74	0	3	0·20	−0·27	10·1	?	9	?
	Fort William ℑ	66	47	61·7	48·3	54·6	+5·3	88	0	5	0·74	−0·06	24·7	?	22	?
1. SCOTLAND, E.	Nairn	64	38	59·3	44·4	51·4	+2·5	66	0	2	0·13	−0·25	*	*	*	*
	Aberdeen	65	41	54·6	46·0	49·8	+1·6	55	0	2	0·21	−0·25	18·9	−24·9	17	−21
	Braemar ℑ	68	41	59·6	43·0	50·8	+5·0	62	0	2	0·35	−0·15	28·3†	?†	25†	?†
	Ochtertyre ℑ	76	44	61·6	46·1	53·2	+5·2	78	0	5	0·78	+0·23	*	*	*	*
	Leith	71	43	59·6	46·1	52·5	+2·7	74	0	4	0·68	+0·30	*	*	*	*
	Marchmont ℑ	74	43	61·9	45·4	53·2	+5·7	78	0	4	0·80	+0·28	22·5	?	20	?
2. ENGLAND, N.E.	Alnwick Castle	64	44	57·7	46·3	51·6	+4·0	67	0	5	0·76	+0·26	*	*	*	*
	Durham	76	41	62·1	45·0	53·0	+4·6	77	0	5	1·55	+1·10	14·7	−25·5	13	−23
	Shields	67	44	56·6	46·0	51·0	+2·7	63	0	5	0·98	+0·59	*	*	*	*
	Scarborough ℳ	69	45	58·4	47·1	52·4	+3·2	73	0	5	0·46	+0·01	*	*	*	*
	York	72	44	65·3	47·3	55·8	+5·3	97	0	5	1·30	+0·87	34·0	− 8·2	31	− 7
	Spurn Head	66	44	58·0	47·1	52·2	+2·6	71	0	5	0·54	+0·19	*	*	*	*
3. ENGLAND, E.	Hillington ℳ	73	45	67·8	48·3	57·5	+6·8	109	0	2	0·25	−0·17	35·0	−12·8	32	−11
	Yarmouth	61	46	58·0	48·7	53·1	+3·2	78	0	2	0·08	−0·33	*	*	*	*
	Geldeston	71	45	65·5	47·9	56·2	+5·5	99	0	2	0·12	−0·27	55·1	+ 3·2	51	+ 3
	Cambridge	80	44	72·0	48·0	59·3	+7·6	121	0	4	0·53	+0·09	40·3	− 4·9	37	− 4
	Rothamsted	78	46	67·6	49·0	57·7	+7·3	110	0	6	1·04	+0·55	30·8	?	28	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	76	42	69·0	46·1	56·9	+6·0	104	0	5	1·35	+0·87	*	*	*	*
	Loughborough	75	45	65·7	47·4	56·0	+4·2	98	0	6	2·28	+1·80	*	*	*	*
	Stamford (Ketton Hall)	74	46	67·0	48·3	57·1	+5·2	106	0	6	0·61	+0·06	*	*	*	*
	Cheadle ℳ	70	44	61·5	47·4	54·0	+4·9	84	0	6	1·30	+0·75	*	*	*	*
	Churchstoke ℳ	71	44	63·1	48·6	55·4	+6·3	94	0	7	2·09	+1·59	21·3	−21·1	19	−20
	Hereford ℳ	75	47	65·8	50·6	57·7	+6·2	110	0	6	2·16	+1·68	*	*	*	*
	Cirencester	75	47	64·0	50·0	56·6	+6·4	102	0	6	1·55	+1·06	21·5	−23·3	20	−21
	Oxford	77	46	67·4	50·3	58·4	+6·7	115	0	6	0·83	+0·38	24·0	−19·8	22	−18
5. ENGLAND, S.	London	77	48	69·0	51·4	59·7	+6·6	124	0	5	0·28	−0·14	29·8†	−12·2†	27†	−12†
	North Foreland	64	46	61·6	50·3	55·6	+4·4	95	0	4	0·46	?	*	*	*	*
	Strathfield Turgiss ℳ	77	43	68·5	48·8	58·1	+6·3	113	0	6	0·87	+0·47	*	*	*	*
	Dungeness	68	49	63·6	52·0	57·5	+5·7	109	0	4	0·15	−0·25	*	*	*	
	Hastings (St. Leonards)	73	45	66·6	51·0	58·3	+5·7	114	0	5	0·26	−0·14	41·9	−12·1	39	−11
	Southampton	74	49	66·7	52·7	59·3	+6·5	121	0	6	0·84	+0·38	34·4	−13·5	32	−12
	Hurst Castle	68	48	63·6	52·9	57·9	+5·7	111	0	5	0·79	+0·39	*	*	*	*
	Stowell ℳ	73	47	64·6	51·2	57·5	+6·7	109	0	7	1·04	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	68	47	61·6	49·1	55·0	+5·3	91	0	5	0·88	−0·04	*	*	*	*
	Glasgow	70	45	59·9	48·1	53·7	+4·1	82	0	5	2·29	+1·74	13·8	−22·2	12	−20
	Ardrossan	68	45	60·6	47·7	53·8	+3·6	83	0	5	1·45	+0·92	*	*	*	*
	Glenlee ℑ	72	42	63·3	47·3	54·8	+6·2	90	0	5	1·63	+0·95	*	*	*	*
	Douglas (Isle of Man)	65	42	59·0	49·0	53·7	+4·0	82	0	6	0·90	+0·40	22·5	−28·3	20	−26
7. ENGLAND, N.W.	Newton Reigny	76	45	63·6	46·8	54·7	+7·3	89	0	5	1·30	+0·83	23·3	−22·7	21	−20
	Stonyhurst	68	44	61·0	48·7	54·5	+4·1	88	0	5	1·28	+0·68	18·1	−25·7	16	−23
	Blackpool ℳ	72	48	64·0	50·6	56·9	+6·3	104	0	6	1·50	+1·02	14·3	−31·5	13	−28
	Manchester	72	46	63·1	49·5	55·9	+5·8	97	0	5	1·52	+0·96	19·7†	?	18†	?
	Liverpool Obsy. (Bidston)	70	49	63·6	51·6	57·2	+5·3	106	0	7	1·01	+0·58	*	*	*	*
	Llandudno ℳ	69	50	64·9	51·2	57·6	+6·1	109	0	7	1·16	+0·74	14·3	−29·2	13	−27
	Holyhead	69	50	63·1	51·6	57·0	+6·1	105	0	6	0·87	+0·44	*	*	*	*
8. ENGLAND, S.W.	Llandovery	76	48	67·9	51·0	58·9	+8·0	118	0	7	1·67	+1·03	*	*	*	*
	Pembroke	64	47	58·7	50·9	54·6	+4·1	88	0	5	0·54	+0·08	24·8	−23·9	23	−22
	Bristol (Montpelier)	77	51	67·9	53·7	60·6	+9·0	130	0	7	1·48	?	*	*	*	*
	Arlington (N. Devon)	70	48	63·4	50·1	56·4	+6·8	101	0	7	1·86	+1·19	*	*	*	*
	Cullompton ℳ	73	49	64·9	51·8	58·0	+6·6	112	0	7	2·20	+1·71	18·1	−25·9	17	−23
	Falmouth	67	45	61·2	51·0	55·8	+4·0	97	0	5	0·61	+0·01	40·4	− 8·6	38	− 8
	Plymouth	68	50	59·8	52·5	55·9	+2·4	97	0	5	1·56	+1·10	27·6	−19·2	26	−18
	Prawle Point	67	51	58·6	51·6	54·9	+3·9	90	0	5	0·77	+0·42	*	*	*	*
9. IRELAND, N.	Malin Head	63	50	57·1	50·1	53·4	+2·4	80	0	4	0·47	?	*	*	*	*
	Londonderry	70	48	65·1	50·5	57·4	+6·1	108	0	6	0·54	+0·01	*	*	*	*
	Edenfel (Omagh)	73	47	64·1	49·4	56·3	+6·9	100	0	6	0·57	+0·06	*	*	*	
	Belmullet	71	49	64·9	53·0	58·6	+6·7	116	0	5	1·08	?	*	*	*	*
	Markree Castle	71	44	65·2	48·6	56·4	+7·2	101	0	5	0·79	+0·34	29·7	−12·6	27	−11
	Brookeborough	73	48	63·1	49·6	56·0	+6·7	98	0	6	0.62	+0·06	*	*	*	*
	Armagh	69	47	61·3	48·8	54·7	+4·8	89	0	5	0·39	−0·06	28·3	−13·6	25	−13
	Donaghadee	62	48	57·1	50·0	53·3	+3·4	79	0	6	0·60	+0·08	*	*	*	*
	Edgeworthstown	71	46	64·4	48·8	56·1	+6·5	99	0	5	1·35	+0·78	*	*	*	*
10. IRELAND, S.	Dublin	66	48	63·2	52·2	57·4	+5·7	108	0	3	0·95	+0·50	32·8	−15·2	30	−14
	Parsonstown	72	39	65·4	48·7	56·6	+5·9	102	0	4	1·91	+1·40	25·2	−17·4	23	−16
	Kilkenny	69	46	62·4	50·4	56·0	+4·8	98	0	5	1·22	+0·77	*	*	*	*
	Waterford	68	44	61·3	49·7	55·2	+3·4	92	0	5	0·74	+0·20	*	*	*	*
	Roche's Point	61	49	59·3	51·4	55·1	+2·6	92	0	6	2·22	+1·52	*	*	*	*
	Valencia	65	46	61·4	51·9	56·4	+4·5	101	0	5	1·07	+0·36	40·5	− 7·0	37	− 7
	Killarney	65	47	62·4	51·2	56·5	+5·3	102	0	4	0·47	?	*	*	*	*
	Foynes	69	47	63·7	50·2	56·6	+5·1	102	0	4	0·83	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	62	50	60·3	52·0	55·9	+3·7	97	0	5	0·57	+0·17	*	*	*	*
	Jersey	75	50	64·0	52·7	58·0	+4·9	112	0	7	1·76	+1·34	22·3	−32·7	21	−31

Stations marked ℳ are in connection with the Royal Meteorological Society, and those marked ℑ with the Scottish Meteorological Society.

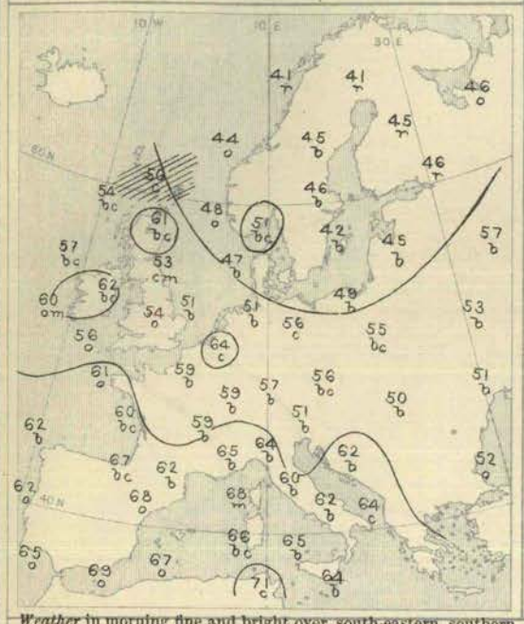
* An asterisk is inserted in all places for which the information is not usually received.

† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row) at the Kew Observatory, and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

Sunday, 14th May.

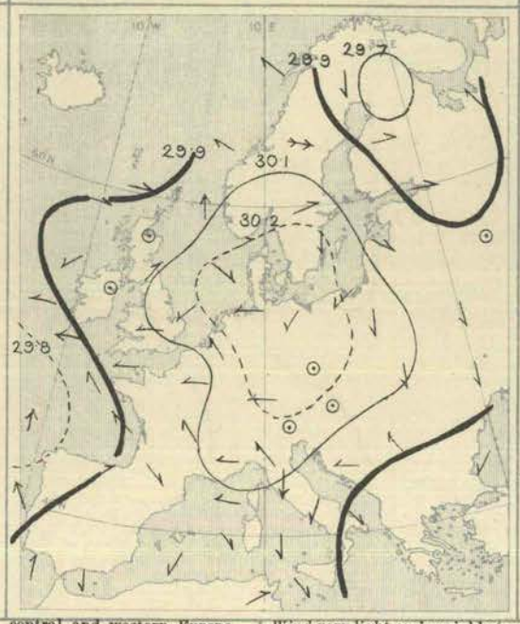
Temperature and Weather.

8 a.m.

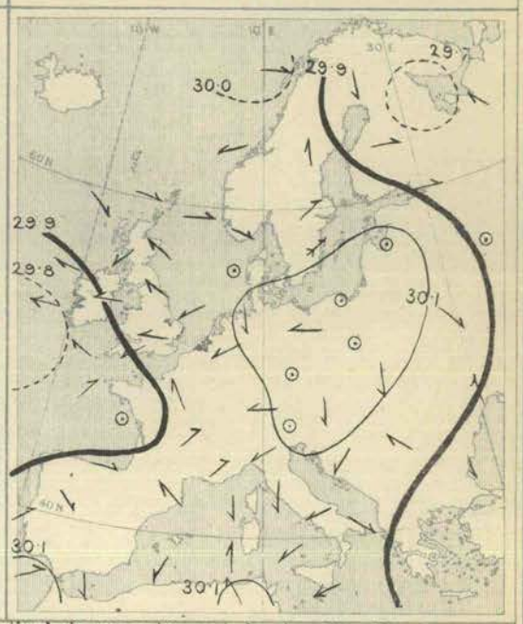


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning fine and bright over south-eastern, southern, central, and western Europe generally, dull and rainy in the north, rainy at Kharkov also. Some rain at most of the Scandinavian stations later, and at a few isolated stations in the west and south-west of the British Islands. Still larger falls over the Peninsula and south-west of France, with a thunderstorm at Biarritz and Bordeaux. Appearance of sky unsettled over the south of England generally.

Temperature showing a further increase over France, Germany, Austria, and the south of Russia, as well as in Ireland, Wales, and the east of Scotland. Morning readings highest, 71° at Sfax, and exceeding 60° over southern Europe generally, as well as in the Netherlands, exceeding 50° except over northern Europe. Lowest, 38° at Uleaborg, 71° at Haparanda and Bodö, 45° at Kuopio, Hernösand, and Riga. Rising during day to between 70° and 78° over the greater part of England and France and southern Europe, to 78° at Brussels, 80° at Paris, and 81° at Biarritz—not exceeding 66° at Lisbon.

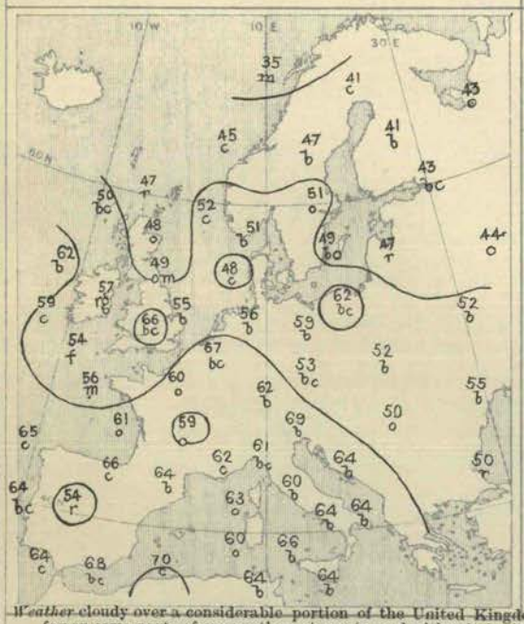
Wind very light and variable (anticyclonic over eastern, central, and southern Europe); more brisk and cyclonic in the west, north-west, and north—(1) Southerly over Portugal and Spain, South-Easterly over the Bay of Biscay, Easterly over the Channel and southern parts of the United Kingdom; (2) Westerly in Scotland, Southerly at Skudesnaes, Easterly in the north-west of Norway; (3) North-Westerly to Westerly over Sweden, Westerly over Finland, South-Easterly at Archangel. Veering towards West in the Spanish Peninsula later, little change elsewhere.

Barometer highest, 30·2 ins. and more to 30·1 ins. in an anticyclone covering the whole of central Europe. Lowest, 29·9 ins. and less over south-eastern Europe; 29·8 ins. and less over the western parts of the Bay of Biscay; 29·9 ins. and less over the Shetlands, and 29·7 ins. and less in a well-marked depression over the north of Finland. Falling later except in Scotland and over the Peninsula. Depression over Bay of Biscay advancing northwards to our south-west coasts.

Monday, 15th May.

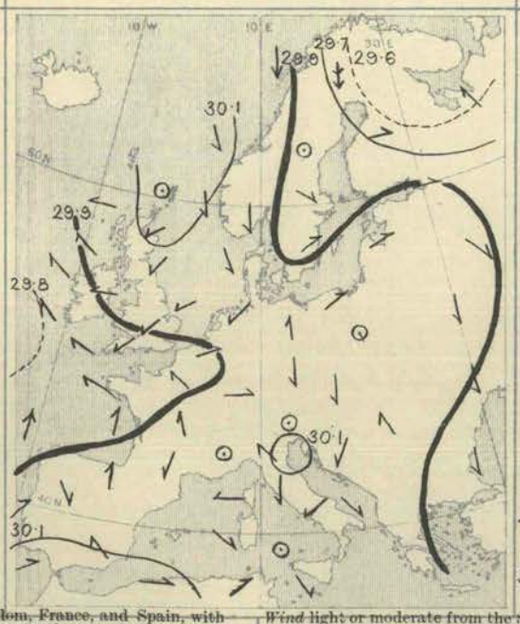
Temperature and Weather.

8 a.m.

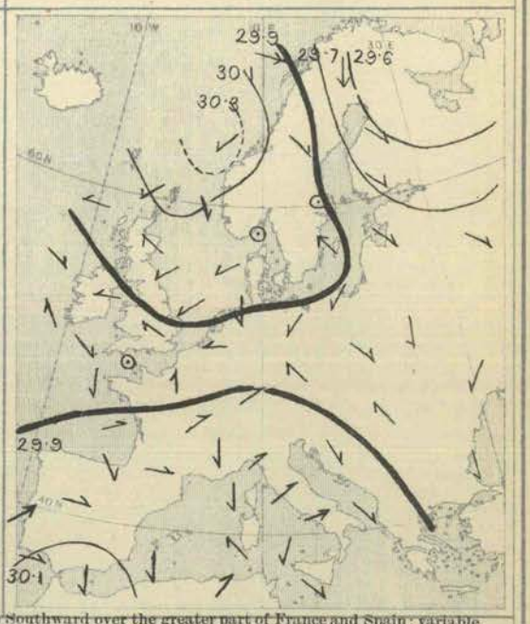


Barometer and Wind.

8 a.m.



6 p.m.



Weather cloudy over a considerable portion of the United Kingdom, France, and Spain, with fog on some parts of our south-west coasts, and with rain in the north-west of England, as well as at Le Mans and Madrid. Fine and bright in the east and south-east of England, as well as over the greater part of northern, eastern, and southern Europe, but rainy at Hangö and Riga. Rain falling during day in many parts of England, Ireland, and France, as well as in the south-west of Scotland, with thunderstorms in many places.

Temperature fallen decidedly in Scotland, risen quickly over the eastern and southern parts of England, changed irregularly elsewhere. Morning readings highest, (1) 70° at Algiers, 69° at Sfax, and 68° at Barcelona and Oran; (2) 67° at Brussels, 66° in London, 63° at Prawle Point, and 62° at Belmullet; above 55° in nearly all parts of Ireland and England. Lowest, 35° at Bodö and Uleaborg, 37° at Hangö, and 41° at Haparanda and Kuopio, below 45° over the northern parts of Russia and Scandinavia generally. Rising during day to between 77° and 80° over the south-eastern parts of England and also in Germany, the north-east of France, and many parts of southern Europe; reaching a maximum of 82° at Brussels and 81° at Florence.

Wind light or moderate from the Southward over the greater part of France and Spain; variable over the English Channel; South-Easterly in the west of our Islands and North-Easterly in the eastern and south-eastern parts of Great Britain. Northerly over Scandinavia, Denmark, and the south of Russia, with a gale at Haparanda. Variable in Germany and Austria, North-Easterly in Italy, variable in Algeria. Subsequently shifting to the South-Westward or Westward in the west of France and also in Italy. No important change occurring elsewhere.

Barometer highest, 30·1 ins. and upwards in an anticyclone lying over the extreme west of Norway and the northern parts of the North Sea, and also in another system lying over Algeria and the south of Spain. Lowest, 29·6 ins. and less in a depression over the extreme north of Russia, 29·8 ins. and less in a shallow system to the south-westward of Ireland; subsidiary "hollow" stretching eastwards across the Channel, the south of England, and the north of France. Changes over western Europe during day very irregular, but small shallow depressions forming over various parts of our western and southern districts.

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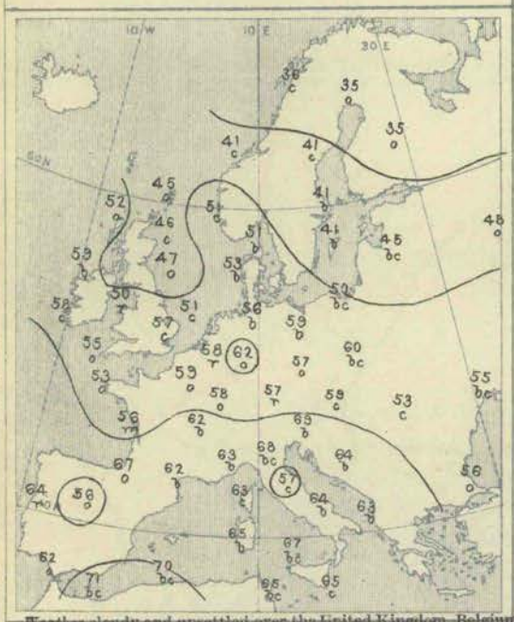
Tuesday, 16th May.

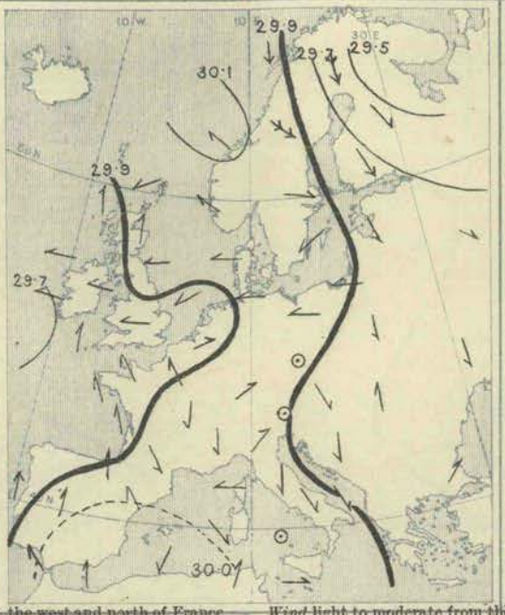
Temperature and Weather. — 8 a.m.

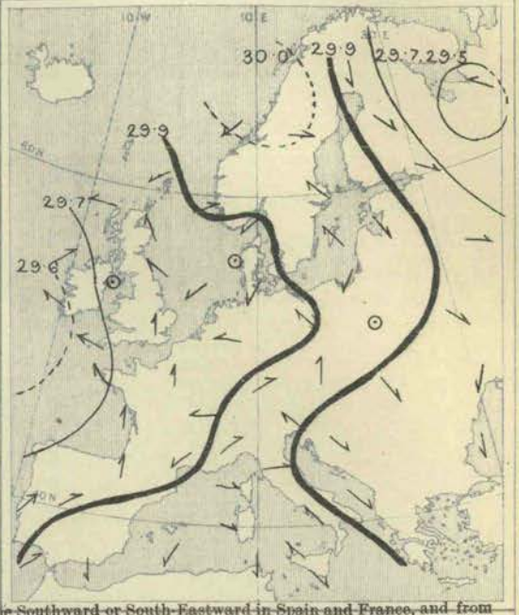


Weather cloudy and unsettled over the United Kingdom, Belgium, the west and north of France, and the greater part of the Spanish Peninsula; rain falling in several parts of our Islands and also at Brussels. Fine in Scandinavia, Denmark, Germany, and Austria, but dull over the northern and central parts of Russia, with snow at Uleaborg. Rain falling later at most of the English and Irish stations, with thunderstorms in many places; amount large (1·1 ins.) at Roche's Point and also at Lisbon. Thunderstorms occurring in some parts of Germany.

Temperature fallen over northern and north-western Europe, risen in Austria, changed irregularly elsewhere. Morning readings highest, 71° at Oran, 70° at Algiers, and 69° at Trieste and Sfax, above 60° over the Mediterranean and Adriatic generally, as well as on the coasts of the Spanish Peninsula. Lowest, 35° at Uleaborg, 35° at Haparanda and Kuopio, 26° at Bodö and 37° at Hangö; below 40° over the northern parts of Sweden and Russia generally. Daily maxima below 50° on the north-east coasts of England, but thermometer rising to 70° at Oxford and Cambridge, and to 71° in London. Exceeding 75° at several of the French, Spanish, and Italian stations, the highest reading of all being 84° at Biarritz.

Barometer and Wind. — 8 a.m. and 6 p.m.



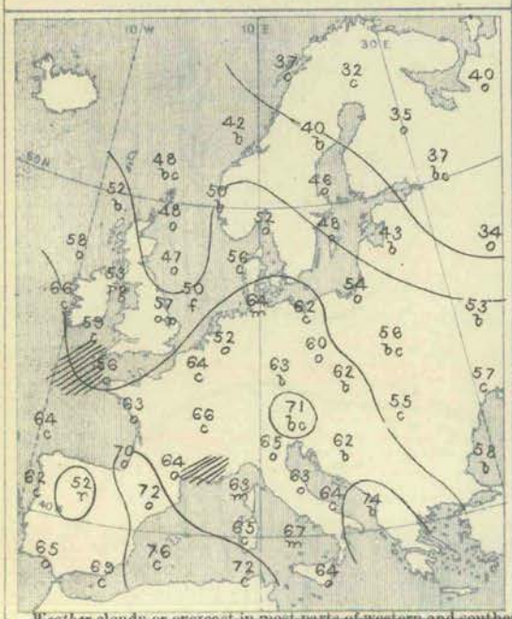


Wind light to moderate from the Southward or South-Eastward in Spain and France, and from between South and East over the United Kingdom and the eastern shores of the North Sea. North-Westerly over Sweden and northern Russia, with a gale in the Gulf of Bothnia. Light and variable in Poland and Austria; Northerly or North-Westerly in Italy. No important change occurring during day.

Barometer highest, 30·1 ins. and upwards in an anticyclone lying off the west of Norway, 30·0 ins. and upwards over Algeria, the south-east of Spain, and the western parts of the Mediterranean. Lowest, 29·5 ins. and less in a large depression lying over northern Russia; 29·7 ins. and less in a shallow disturbance lying off the south-west of Ireland; a subsidiary "hollow" extending eastwards from the latter system as far as the south-east of England and the Netherlands. General fall of barometer taking place over western Europe during day, and depression in south-west becoming rather more pronounced. Disturbance over northern Russia moving slowly eastwards.

Wednesday, 17th May.

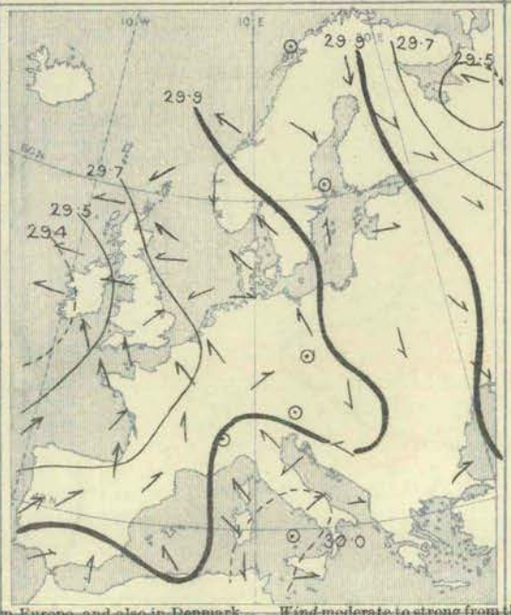
Temperature and Weather. — 8 a.m.

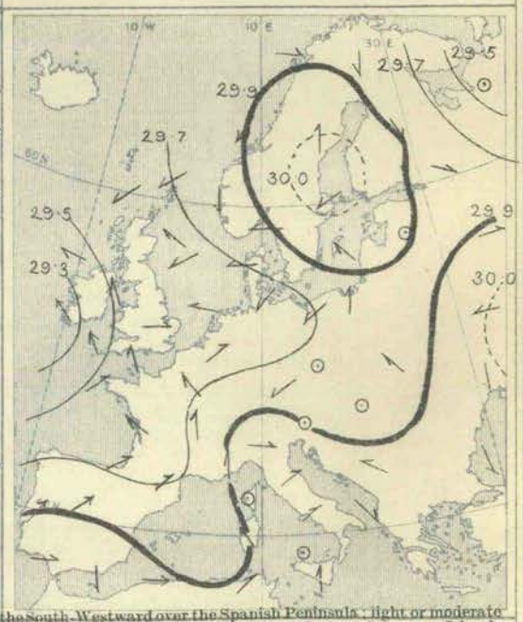


Weather cloudy or overcast in most parts of western and southern Europe, and also in Denmark and the south of Sweden, with rain at several of the English stations as well as at Madrid. Fine and bright over the greater part of northern, eastern, and central Europe, as well as in the south of Italy. Heavy rain falling later in many parts of our Islands and the north of France, the largest amounts being 1·6 ins. at Loughborough, 0·9 in. at Jersey, and 0·8 in. at Ardrossan. Thunderstorms occurring in the south-east of England, also at Carlsruhe, and thunder heard at Cuxhaven.

Temperature risen a little in most places. Morning readings highest, 76° at Algiers, 74° at Brindisi, and 72° at Barcelona and La Calle, and 71° at Trieste, above 60° over the greater part of central and southern Europe, and just reaching that point at Valencia (Ireland). Lowest, 32° at Haparanda, 33° at Uleaborg, 34° at Moscow, and 35° at Kuopio. Rising during day to 65° or more at several of the English and Irish stations, and reaching 71° at Cambridge. Exceeding 75° over Germany and the central and southern parts of France, reaching 84° at Belfort, and touching 90° over some parts of Algeria.

Barometer and Wind. — 8 a.m. and 6 p.m.





Wind moderate to strong from the South-Westward over the Spanish Peninsula; light or moderate from the Southward in France, and from the South-Eastward or Eastward over our Islands and the eastern shores of the North Sea. North-Westerly or Northerly over Sweden and Russia, variable in Austria and Italy; South-Easterly in Algeria. No important change occurring over western Europe during day, except some increase in the South-Easterly wind in the south of Ireland.

Barometer highest, 30·0 ins. and upwards in four areas lying respectively over the north-west of Norway, Galicia, Tunis, Sicily, and the south-west of Italy and Morocco, 29·9 ins. and less in a broad band extending northwards from the eastern parts of the Mediterranean, across western Russia to the Baltic and Scandinavia. Lowest, 29·4 ins. and less in a depression lying off the south-west of Ireland, 29·5 ins. and less in another system over northern Russia. Fall of barometer taking place in most parts of western Europe during day, and shallow secondary depressions advancing northwards over England.

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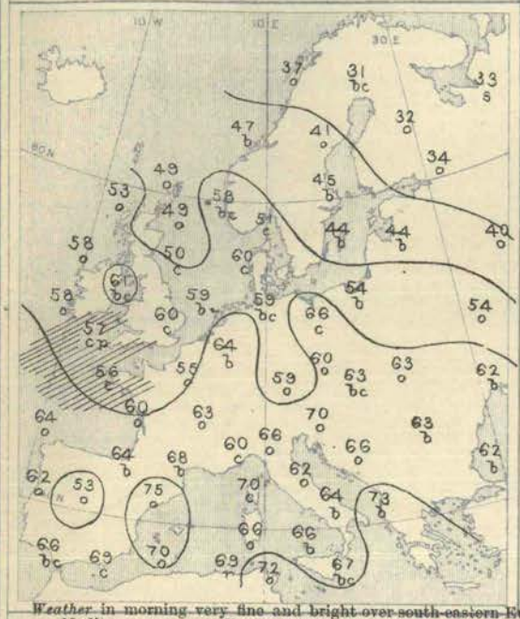
Thursday, 18th May.

Temperature and Weather.

8 a.m.

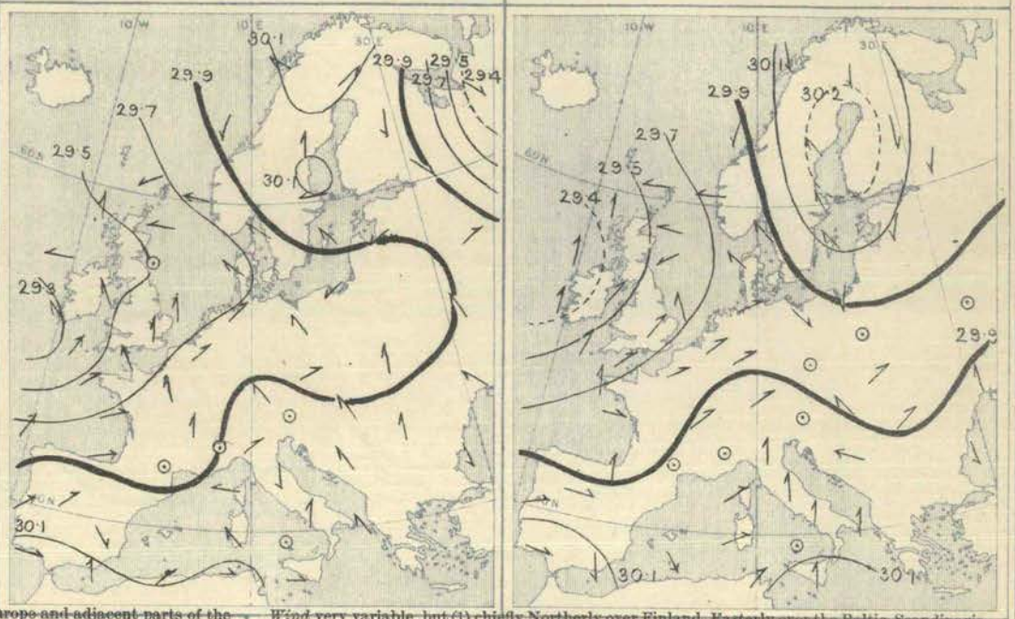


Weather in morning very fine and bright over south-eastern Europe and adjacent parts of the Mediterranean, as well as over many parts of Scandinavia and the Baltic, cloudy and very changeable over the western countries, with showers in the south and south-west of our Islands. Rain falling later in nearly all parts of western, northern, and central Europe, amounts large in places. Thunderstorms occurring generally over the northern half of England, and thunder heard at Clermont.

Temperature risen over England and central Europe, but changing somewhat fitfully. Morning readings highest, 60° to 75° at the Mediterranean stations, and exceeding 60° over southern and central Europe generally; exceeding 50° over the United Kingdom and north of France. Lowest, 31° at Haparanda, and 32° to 38° over Lapland, Finland, and the north of Russia, as a whole, 40° at Moscow, 45° at Kharkov and Stockholm. Rising later to between 60° and 70° over the inland parts of England, to between 70° and 75° over Germany, and to between 70° and 78° over the southern half of France. Exceeding 80° in some parts of Austria and southern Italy.

Barometer and Wind.

8 a.m. 6 p.m.



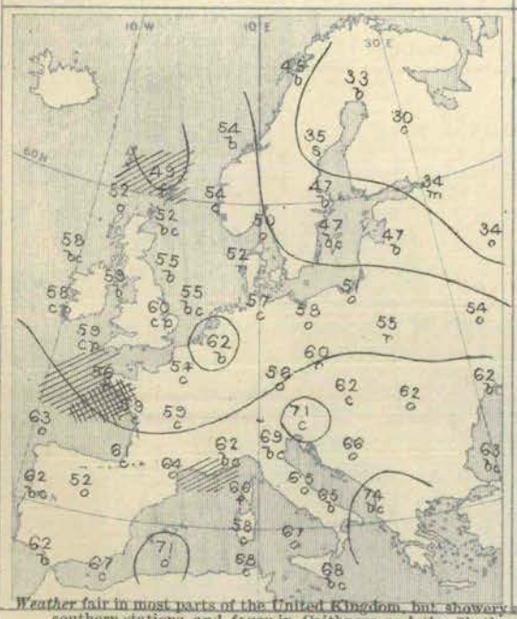
Wind very variable, but (1) chiefly Northerly over Finland, Easterly over the Baltic, Scandinavia, and the northern parts of Great Britain: (2) South-Westerly over Portugal and Spain, Southerly over France, and Southerly to South-Easterly over the Channel and England, South-Easterly to Easterly over Ireland. Veering to South-South-West and freshening over the south of England later, and to south on our western coasts.

Barometer highest, 30·1 ins. and more to 29·9 ins. (1) over Lapland, Scandinavia, and the Baltic; (2) over the south-eastern parts of Russia and the Black Sea; (3) over Algeria, the south of Spain and the Mediterranean generally. Lowest, 29·4 ins. and less (1) in a depression over the north of Russia, (2) in another over the south-western half of Ireland, the Scilly Islands, and adjacent parts of the Atlantic. Rising over France, Germany, the southern parts of our Islands later, falling a little in Scotland and the north of Ireland.

Friday, 19th May.

Temperature and Weather.

8 a.m.

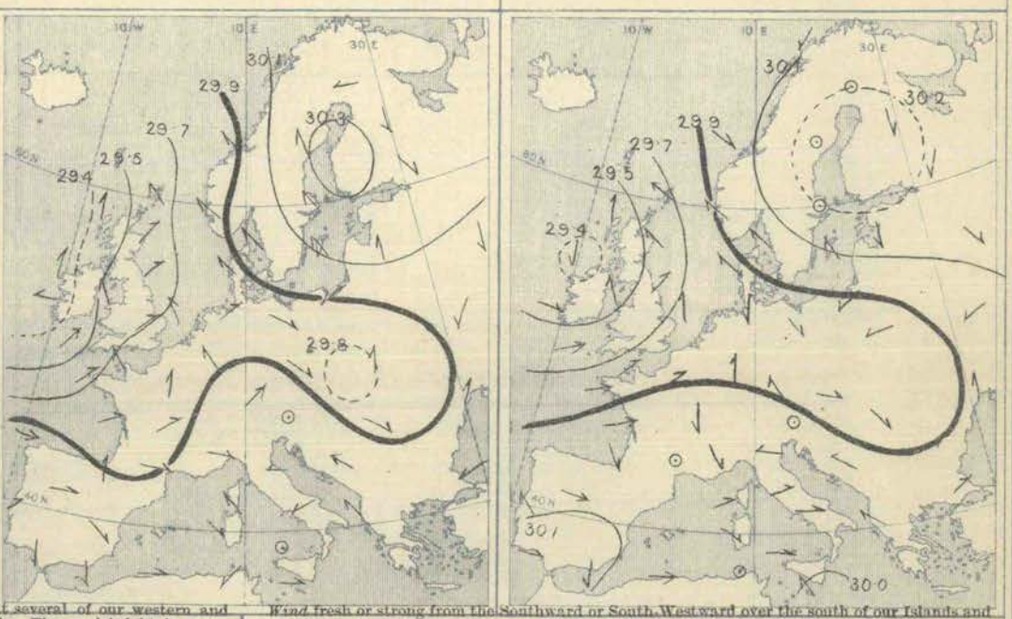


Weather fair in most parts of the United Kingdom, but showery at several of our western and southern stations, and foggy in Caithness and the Shetlands. Fine and bright in many parts of Scandinavia and northern Russia, as well as in Italy and the south of Spain; cloudy or overcast over the more central parts of the Continent, with rain at Fanö, Breslau, Warsaw, and Lemberg. Snow falling at Hernösand. Heavy showers falling during day in most parts of western Europe; amount collected next morning as large as 1·2 ins. at Brest, and 0·7 in. at Parsonstown. Thunder heard at Spurn Head and thunderstorms occurring in several parts of France.

Temperature changed little and irregularly. Morning readings highest, 74° at Brindisi, 71° at Trieste, Algiers, and Sfax, and 69° at Leghorn; above 60° in most parts of central, southern, and eastern Europe. Lowest, 30° at Kuopo, 32° at Uleaborg, 33° at Haparanda, and 34° at St. Petersburg and Moscow; below 40° over the northern parts of Sweden and Russia generally. Rising during day to between 60° and 65° in many parts of the United Kingdom, and reaching 67° at Cambridge. Exceeding 70° at several of the French and German stations, and exceeding 80° in some parts of Italy.

Barometer and Wind.

8 a.m. 6 p.m.



Wind fresh or strong from the Southward or South-Westward over the south of our Islands and the west of France, light or moderate from the Southward in the northern parts of the United Kingdom, and from the South-Eastward over Scandinavia and Denmark. Northerly or North-Westerly over the northern and central parts of Russia. Cyclonic circulation of light winds reported over Austria and eastern Germany; Easterly over Italy. Subsequently veering to the Westward in the south of Ireland and the west of France, no important change elsewhere.

Barometer highest, (1) 30·3 ins. and upwards over the southern parts of the Gulf of Bothnia, 30·1 ins. and upwards over the whole of Sweden and northern Russia; (2) 30·1 ins. to 30·2 ins. over Algeria and the south of Spain. Lowest, 29·4 ins. and less in a depression lying off our extreme western coasts, 29·8 ins. and less in a shallow system lying over Galicia. Depression in west subsequently advancing north-eastwards, but changes in pressure over our Islands very irregular.

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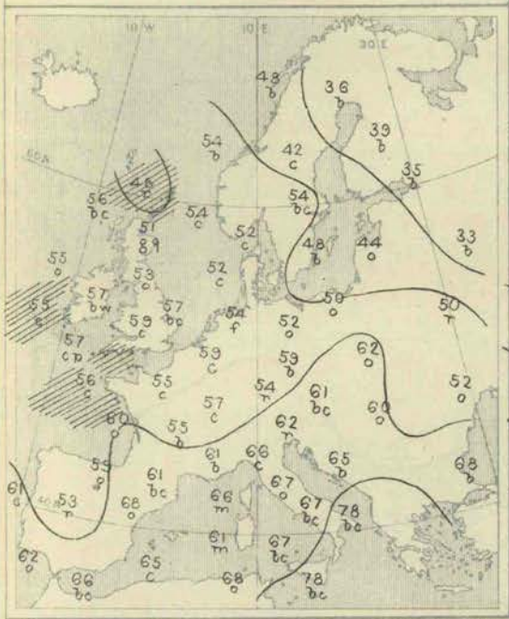
Saturday, 20th May.

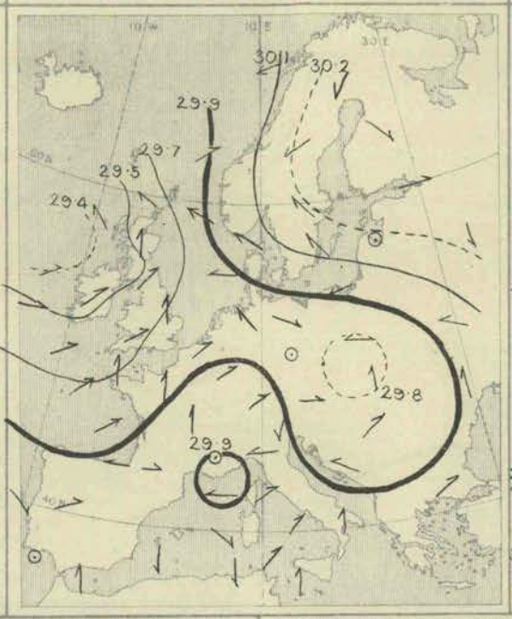
Temperature and Weather.

8 a.m.

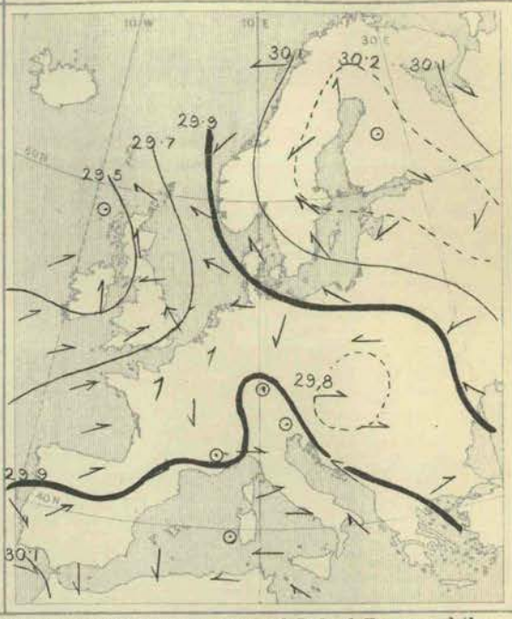


Barometer and Wind.

8 a.m.



6 p.m.



Weather changeable and showery over the greater part of the United Kingdom, but fine at several of our eastern and southern stations. Dull in many parts of Germany, France, Spain, and northern Italy, with rain in places; fine and bright in Scandinavia, Russia, and the south of Italy. Showers falling during day in most parts of western Europe, heavily at some of our western stations. Thunder and lightning occurring in the north of England, as well as at Lyons.

Temperature changed little and irregularly. Morning readings highest, 78° at Brindisi and Malta, 68° at Barcelona, La Calle, and Tunis, and 67° at Rome, Naples, and Palermo; above 60° in most parts of southern Europe, and just reaching that point at Cambridge. Lowest, 33° at Moscow, 35° at St. Petersburg, 36° at Haparanda, and 39° at Uleaborg, Kuopio, and Hango. Rising during day to between 65° and 68° over the central parts of England, and to 70° or more over the greater part of central and southern Europe, the highest readings of all being 84° at Brindisi and 81° at Palermo.

Wind Westerly in Spain; South-Westerly or Southerly over England, Ireland, France, and the Netherlands; South-Easterly in Scotland and also on the eastern shores of the North Sea. Light and variable over Russia and Austria; Southerly or South-Westerly in Italy; chiefly Northerly in Algeria. No important change occurring during day.

Barometer highest, 30·2 ins. and upwards in a large anticyclone lying over the northern parts of Russia; 30·1 ins. and upwards in another system lying off the south of Spain. Lowest, 29·4 ins. and less in a depression to the north-westward of our Islands; 29·8 ins. and less in a very shallow system over Poland. Depression in north-west subsequently dispersing gradually, but shallow subsidiary disturbances appearing over the central parts of our Islands, and barometer falling at many of our eastern and southern stations.

GENERAL NOTES.

The distribution of pressure observed over western Europe during this period has differed widely from that of the past few weeks. At the commencement of the time a shallow depression arrived off our extreme south-west coasts, while small secondary systems were developed over Spain and the Bay of Biscay. The disturbances, both main and secondary, afterwards moved slowly northwards, so that the Easterly winds and fair weather which prevailed at the opening of the week gave place to variable Southerly or South-Westerly breezes, with copious falls of rain in most parts of the United Kingdom and France, and with thunderstorms in many places. After the 16th an anticyclonic area was gradually developed over Scandinavia and northern Russia, but at the close of the week this was drifting away to the eastward and changeable weather was spreading over the entire Continent.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 116.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	STATIONS. *	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	14·4	?	13	?	EASTBOURNE	35·1	?	33	?
OSWALDKIRK (Yorkshire)	27·8	?	25	?	TENBY	27·6*	?	25*	?
WORKSOP	27·9	−11·5	25	− 11	NEWQUAY				
THURCASTON (Leicestershire)	26·4	−13·4	24	− 12	TORQUAY	20·1*	?	19*	?
MARGATE	47·4	?	44	?	ARLEY COTTAGE (County Cavan)	19·7	?	18	?
WESTBOURNE (Sussex)	40·6 *	?	38*	?	GUERNSEY	32·6*	?	31*	?
BRIGHTON	32·1	?	30	?					

* The values at Westbourne, Tenby, Torquay and Guernsey are obtained by Jordan's Photographic Recorder.

REPORTS received too late for insertion in their proper places.

DATE OF REPORT.	NAMES OF STATIONS.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-Degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°	°	°		Inches.	Inches.				
Feb. 18th, 1893.	Sumburgh Head	47	24	41·1	32·1	36·6	−2·0	0	38	7	0·77	−0·03	—	—	—	—
,, ,, ,,	Edgeworthstown	?	31	?	34·3	?	?	?	?	5	1·03	+0·33	—	—	—	—
,, 25th, ,,	Sumburgh Head	47	21	41·1	34·0	37·6	−0·7	0	31	5	0·37	−0·41	—	—	—	—
Mar. 4th, ,,	Sumburgh Head	47	24	42·6	32·4	37·4	+0·7	2	33	5	0·53	−0·20	—	—	—	—
,, ,, ,,	Glencarron	51	23	41·2	30·6	35·7	−1·6	0	44	7	1·04	−0·36	—	—	—	—
,, 18th, ,,	Scarborough	63	29	49·3	34·8	41·8	+0·9	20	29	2	0·02	−0·42	—	—	—	—
,, ,, ,,	Edgeworthstown	52	31	47·3	34·9	40·9	+0·1	15	27	6	0·28	−0·35	—	—	—	—
,, 25th, ,,	Edgeworthstown	65	32	58·0	36·3	46·8	+5·6	58	16	0	—	−0·61	—	—	—	—
April 1st, ,,	Alnwick Castle	58	26	51·9	38·1	44·8	+4·3	36	11	—	—	—	—	—	—	—
,, ,, ,,	Scarborough	62	33	52·6	37·7	44·9	+2·8	38	12	0	—	−0·48	—	—	—	—

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WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; R. H. SCOTT, F.R.S., SECRETARY.

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VOL. X. No. 21.] *Third Series.* WEEK ENDING SATURDAY, 27TH MAY, 1893. [*Price 6d.* [*Annual Subscription, post paid, £1 10s. 0d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871-90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the twenty-five years 1866-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90 only BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the ten years 1881-90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

	DISTRICTS. (See p. 116.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 1st, 1893. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	65	38	57·6	46·0	51·5	3 above.	67	+18	0	− 3	573	+233	485	− 53
	1. SCOTLAND, EAST	71	42	62·4	47·3	54·4	5 above.	87	+23	0	− 3	662	+197	548	− 20
	2. ENGLAND, N.E.	68	43	62·3	48·1	54·8	4 above.	90	+26	0	− 2	681	+234	436	− 62
	3. ENGLAND, EAST	73	39	64·8	47·5	55·7	4 above.	96	+17	0	− 3	876	+300	524	− 37
	4. MIDLAND COUNTIES	73	36	64·8	46·0	54·8	3 above.	90	+12	0	− 2	976	+373	505	− 46
	5. ENGLAND, SOUTH	74	39	65·2	48·7	56·4	3 above.	101	+17	0	0	970	+319	373	− 43
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	66	41	59·6	48·7	53·8	3 above.	83	+17	0	− 2	748	+265	354	− 62
	7. ENGLAND, N.W.	68	42	60·1	48·9	54·1	3 above.	85	+14	0	− 1	846	+343	323	− 91
	8. ENGLAND, S.W.	72	38	62·9	48·3	55·2	3 above.	92	+17	0	0	1003	+375	246	− 70
	9. IRELAND, NORTH	68	44	60·0	49·8	54·6	3 above.	88	+20	0	− 1	851	+280	258	−104
	10. IRELAND, SOUTH	68	40	62·2	50·3	55·9	3 above.	97	+22	0	0	1016	+319	178	− 99
	—CHANNEL ISLANDS	67	49	61·6	52·5	56·8	3 above.	104	+22	0	0	1151	+421	70	− 52

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 116.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the mean for the Week.	From Jan. 1st, 1893. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 1st, 1893. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	5	8	2 more.	92	− 6	16·9	− 1·9	20	− 18	17	−16	428	− 47	25	− 3
	1. SCOTLAND, EAST	3	2	2 less.	73	− 6	8·1	− 3·3	40	+ 3	34	+ 1	555	+ 25	32	+ 1
	2. ENGLAND, N.E.	1	1	4 less.	59	−15	6·4	− 2·6	42	0	36	0	642	+167	37	+ 9
	3. ENGLAND, EAST	1	3	1 less.	59	−14	6·0	− 2·8	45	− 4	41	− 4	756	+192	44	+ 11
	4. MIDLAND COUNTIES	1	less than ½	5 less.	69	−11	6·7	− 3·4	48	+ 5	42	+ 5	723	+225	42	+ 13
	5. ENGLAND, SOUTH	1	1	3 less.	57	−13	6·7	− 3·4	47	0	43	0	773	+244	45	+ 14
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	4	5	2 less.	77	− 7	13·7	− 5·4	42	− 3	37	− 1	589	+ 77	34	+ 4
	7. ENGLAND, N.W.	3	2	3 less.	65	−12	8·6	− 3·1	31	− 12	28	−10	605	+104	35	+ 6
	8. ENGLAND, S.W.	2	1	4 less.	61	−17	10·6	− 4·3	50	+ 1	46	+ 2	801*	+204	46	+ 11
	9. IRELAND, NORTH	4	4	1 less.	78	−11	10·5	− 2·5	21	− 21	19	−18	494	− 12	29	0
	10. IRELAND, SOUTH	3	3	2 less.	68	−15	11·5	− 3·8	22	− 24	20	−21	590	+ 7	34	0
	—CHANNEL ISLANDS	2	less than ½	4 less.	67	−19	8·8	− 3·6	70	+ 12	65	+11	909	+204	53	+ 12

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather continued cloudy or dull in the extreme west and north, with occasional falls of rain, but in all other parts of the Kingdom it was dry, with a fair amount of sunshine.

Temperature was again above the mean, the excess ranging from 3° in most districts to 5° in Scotland E. The highest of the maxima were recorded either on the 22nd or 25th, and varied from 74° in England S., and 73° in England E. and the Midland Counties, to 67° in the Channel Islands, 66° in Scotland W., and to 65° in Scotland N. The lowest of the minima were registered on somewhat irregular dates, and ranged from 36° in the Midland Counties, to 44° in Ireland N., and to 49° in the Channel Islands.

Rainfall was rather more than the mean in Scotland N., but less in all other districts. Over England, as a whole, the fall was very slight, but a considerable fall was experienced at some of the south-eastern stations on the first day of the period.

Bright Sunshine was more prevalent over England and the greater part of Scotland than during the preceding week, but less so in Ireland and the north of Scotland. The percentage of the possible duration ranged from 65 in the Channel Islands to between 41 and 46 in most parts of England to 19 or 20 in Ireland and to 17 in Scotland N.

Barometer and Wind.—At the commencement of the period the barometer was lowest in the west, highest in the east, and light or moderate winds from the Southward were general. As the week progressed, however, anticyclones spread over us, at first from the south-westward and afterwards from the westward, causing the wind to shift to West and North-West. No depressions appeared directly over us, but a small system was shown off our south-east coasts on the 22nd, and later on some large disturbances skirted our extreme north-western and northern coasts.

* This value has been altered slightly owing to additional information for a preceding week.

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II.—DATA from which the SUMMARY on page 121 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		*	*	*	*	*	*				Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	55	44	53·1	45·1	48·9	+ 2·6	48	0	6	0·48	+0·08	*	*	*	*
	Stornoway	60	45	56·6	46·7	51·4	+ 3·4	66	0	7	0·73	+0·11	23·9	− 17·6	20	−16
	Wick	61	38	67·6	45·0	50·9	+ 2·6	62	0	2	0·24	−0·14	*	*	*	*
	Lairg §	63	40	58·7	44·1	51·0	+ 1·8	63	0	5	0·33	−0·16	*	*	*	*
	Glencarron §	63	41	57·5	45·2	51·0	+ 2·6	63	0	?6	?1·41	?+ 0·31	*	*	*	*
	Fort Augustus §	65	42	61·3	47·1	53·8	+ 4·3	83	0	4	0·78	+0·33	12·7	?	11	?
	Fort William §	62	48	58·3	48·6	53·2	+ 2·8	78	0	5	1·43	+0·59	22·0	?	19	?
1. SCOTLAND, E.	Nairn	68	42	63·3	47·3	54·8	+ 4·4	90	0	3	0·16	−0·24	*	*	*	*
	Aberdeen	65	45	61·0	48·0	54·1	+ 4·5	85	0	4	0·18	−0·24	46·5	+ 1·2	40	+ 1
	Braemar §	61	44	56·9	45·1	50·7	+ 3·4	61	0	3	0·26	−0·24	30·7†	?†	26†	?†
	Ochtertyre §	70	45	65·3	47·9	56·1	+ 6·4	99	0	2	0·12	−0·44	*	*	*	*
	Leith	71	45	65·7	48·9	56·8	+ 5·5	104	0	2	0·12	−0·24	*	*	*	*
	Marchmont §	66	45	62·3	46·7	54·0	+ 4·7	84	0	3	0·50	−0·02	40·5	?	35	?
2. ENGLAND, N.E.	Alnwick Castle	64	45	61·6	48·9	54·9	+ 5·8	90	0	2	0·12	−0·32	*	*	*	*
	Durham	68	43	63·7	46·2	54·4	+ 4·7	87	0	1	0·05	−0·40	41·1	+ 0·2	36	+ 1
	Shields	66	45	61·9	47·3	54·2	+ 4·5	85	0	1	0·05	−0·32	*	*	*	*
	Scarborough ℳ	65	47	62·3	48 7	55·1	+ 4·5	92	0	1	0·02	−0·45	*	*	*	*
	York	67	43	64·4	47·4	55·4	+ 3·5	94	0	2	0·02	−0·43	46·1	+ 4·3	40	+ 2
	Spurn Head	67	49	59·9	50·1	54·7	+ 3·6	89	0	1	0·03	−0·35	*	*	*	*
3. ENGLAND, E.	Hillington ℳ	70	39	66·2	46·1	55·6	+ 3·3	95	0	1	0·08	−0·35	46·6	− 1·5	42	0
	Yarmouth	66	47	61·1	49·7	55·1	+ 3·8	92	0	2	0·57	+0·17	*	*	*	*
	Geldeston	69	44	64·5	46·8	55·1	+ 2·8	92	0	2	0·90	+0·50	39·1	−13·5	35	−12
	Cambridge	73	45	67·9	47·9	57·3	+ 4·1	107	0	0	—	−0·48	47·7	+ 1·7	43	+ 2
	Rothamsted	69	44	64·5	47·1	55·3	+ 3·3	93	0	1	0·04	−0·42	46·9	?	42	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	69	42	64·7	46·4	55·0	+ 2·6	91	0	1	0·01	−0·49	*	*	*	*
	Loughborough	73	44	66·3	47·4	56·3	+ 3·0	100	0	0	—	−0·49	*	*	*	*
	Stamford (Ketton Hall)	70	40	67·0	45·3	55·5	+ 2·1	95	0	0	—	−0·50	*	*	*	*
	Cheadle ℳ	66	43	60·7	46·4	53·1	+ 2·8	78	0	1	0·12	−0·46	*	*	*	*
	Churchstoke ℳ	67	37	62·8	46·0	53·9	+ 3·5	83	0	2	0·14	−0·37	48·6	+ 5·2	43	+ 4
	Hereford ℳ	70	39	66·7	46·5	56·0	+ 2·7	98	0	0	—	−0·48	*	*	*	*
	Cirencester	67	36	64·4	42·4	52·7	+ 1·1	75	0	1	0·08	−0·42	55·0	+ 9·2	50	+ 9
	Oxford	70	44	65·6	47·3	55·9	+ 2·7	97	0	0	—	−0·47	46·7	+ 1·9	42	+ 2
5. ENGLAND, S.	London	73	46	66·7	50·1	57·9	+ 3·6	111	0	1	0·01	−0·43	41·1†	− 2·3†	37†	− 3†
	North Foreland	69	49	63·6	51·0	56·9	+ 4·4	104	0	1	0·61	?	*	*	*	*
	Strathfield Turgiss ℳ	71	41	67·0	43·3	54·4	+ 1·2	87	0	1	0·05	−0·35	*	*	*	
	Dungeness	66	48	62·4	50·0	55·8	+ 2·5	97	0	1	0·18	−0·22	*	*	*	
	Hastings (St. Leonards)	67	47	63·2	49 8	56·1	+ 2·4	99	0	1	0·10	−0·32	42·4	−12·8	39	−12
	Southampton	74	46	68·9	47·7	57·7	+ 3·2	110	0	0	—	−0·47	61·3	+12·3	56	+12
	Hurst Castle	74	48	65·4	51·9	58·3	+ 4·6	114	0	0	—	−0·40	*	*	*	*
	Stowell ℳ	66	39	64·0	45·4	54·1	+ 1·8	85	0	3	0·10	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	62	46	58·9	48·3	53·3	+ 2·5	79	0	7	0·78	−0·20	*	*	*	*
	Glasgow	66	47	60·9	49·3	54·8	+ 3·8	90	0	3	0·22	−0·34	45·9	+ 9·9	40	+ 8
	Ardrossan	63	47	58·7	49·3	53·7	+ 2·3	82	0	4	0·32	−0·23	*	*	*	*
	Glenlee §	65	41	60·5	48·0	53·9	+ 3·8	83	0	3	0·64	−0·03	*	*	*	*
	Douglas (Isle of Man)	63	47	59·1	48·5	53·3	+ 2·4	79	0	5	0·46	−0·03	38·1	−13·2	33	−12
7. ENGLAND, N.W.	Newton Reigny	65	42	60·9	46·9	53·5	+ 4·6	81	0	3	0·19	−0·28	34·4	−12·4	30	−12
	Stonyhurst	63	44	59·0	48·7	53·5	+ 1·9	81	0	4	0·20	−0·43	33·7	−11·2	30	− 9
	Blackpool ℳ	61	46	59·5	50·4	54·7	+ 3·0	89	0	2	0·15	−0·34	30·2	−16·0	26	−15
	Manchester	68	42	61·0	47·0	53·6	+ 2·2	81	0	3	0·16	−0·44	19·7†	?	18†	?
	Liverpool Obsy. (Bidston)	63	45	59·9	49·4	54·3	+ 1·6	86	0	3	0·22	−0·22	*	*	*	*
	Llandudno ℳ	63	47	60·5	50·1	54·7	+ 2·0	89	0	2	0·05	−0·35	37·6	− 6·4	34	− 6
	Holyhead	63	47	59·6	49·9	54·5	+ 2·3	88	0	2	0·18	−0·24	*	*	*	*
8. ENGLAND, S.W	Llandovery	72	38	66·1	47·0	56·0	+ 3·6	98	0	3	0·20	−0·45	*	*	*	*
	Pembroke	61	47	58·4	51·C	54·5	+ 2·8	88	0	1	0·08	−0·37	50·7	+ 0·7	46	0
	Bristol (Montpelier)	72	42	66·6	48·7	57·1	+ 4·0	106	0	1	0·09	?	*	*	*	*
	Arlington (N. Devon)	63	49	61·1	55·4	52·8	+ 1·9	76	0	2	0.09	−0·59	*	*	*	*
	Cullompton ℳ	69	38	64·8	46·3	55·0	+ 2·6	91	0	2	0·06	−0·42	43·8	− 2·0	40	− 1
	Falmouth	66	42	61·9	49·4	55·3	+ 2·4	93	0	1	0·04	−0·56	55·9	+ 5·7	51	+ 4
	Plymouth	67	42	63·1	49·2	55·7	+ 1·0	96	0	2	0·02	−0.42	50·7	+ 3·2	47	+ 3
	Prawle Point	69	46	61·1	49·4	54·9	+ 2·7	90	0	2	0·03	−0·31	*	*	*	*
9. IRELAND, N.	Malin Head	60	48	57·1	49·7	53·2	+ 1·1	78	0	5	0·22	?	*	*	*	*
	Londonderry	68	49	60·7	50·1	55·1	+ 2·7	92	0	6	0·44	−0·10	*	*	*	*
	Edenfel (Omagh)	64	46	60·7	49·1	54·6	+ 3·9	88	0	2	0·33	−0·21	*	*	*	
	Belmullet	62	47	58·9	51·3	54·9	+ 2·2	90	0	5	0·85	?	*	*	*	*
	Markree Castle	64	46	59·5	49·2	54·0	+ 3·7	84	0	7	0·50	+0·03	25·0	−17·0	22	−14
	Brookeborough	67	44	60·6	49·1	54·5	+ 3·8	88	0	3	0.42	−0·17	*	*	*	*
	Armagh	64	47	60·6	49·5	54·7	+ 3·5	89	0	5	0·47	+0·02	17·2	−25·0	15	−22
	Donaghadee	63	48	60·1	51·9	55·8	+ 4·4	97	0	3	0·22	−0·29	*	*	*	*
	Edgeworthstown	66	44	61·6	48·5	54·7	+ 3·8	89	0	3	0·40	−0·20	*	*	*	*
10. IRELAND, S.	Dub in	65	47	62·2	51·3	56·4	+ 3·5	101	0	4	0·14	−0·30	22·9	−25·2	20	−24
	Parsonstown	65	46	61·7	50·4	55·7	+ 3·6	96	0	4	0·52	0·00	12·7	−29·9	11	−26
	Kilkenny	66	44	63·0	49·6	55·9	+ 3·5	97	0	4	0·72	+0·24	*	*	*	*
	Waterford	68	40	64·9	48·2	56·1	+ 2·9	99	0	3	0·28	−0·26	*	*	*	*
	Roche's Point	66	46	62·0	50·7	56·0	+ 2·5	98	0	3	0·07	−0·63	*	*	*	*
	Valencia	64	48	59·9	51·1	55·2	+ 2·3	92	0	3	0·24	−0·46	30·6	−17·3	28	−16
	Killarney	65	43	62·1	49·0	55·2	+ 3·0	92	0	3	0·17	?	*	*	*	*
	Foynes	67	50	61·7	52·1	56·6	+ 4·1	102	0	3	0·39	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	61	49	60·1	53·1	56·4	+ 3·2	101	0	1	0·01	−0·37	*	*	*	*
	Jersey	67	49	63·0	51·9	57·1	+ 2·7	106	0	2	0·03	−0·39	68·2	+12·0	63	+11

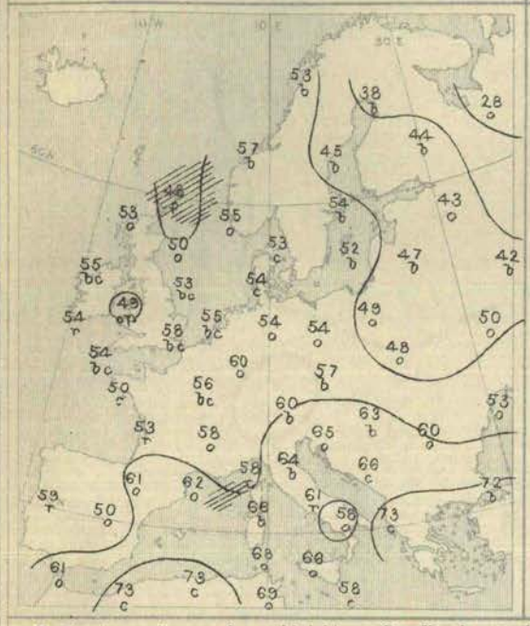
Stations marked ℳ are in connection with the Royal Meteorological Society, and those marked § with the Scottish Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

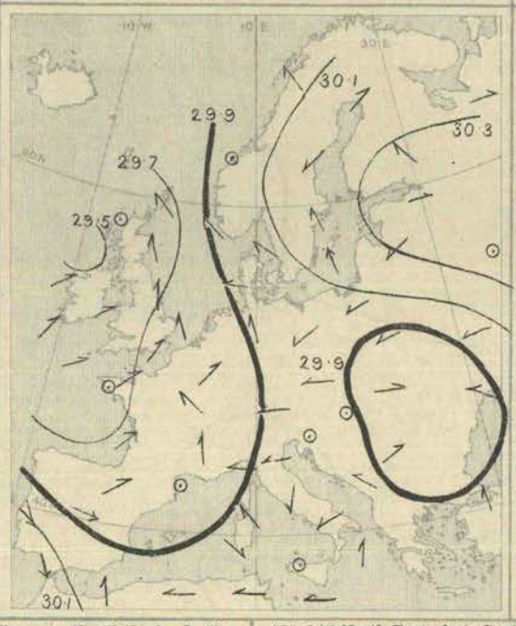
† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row) at the Kew Observatory, and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

Sunday, 21st May.

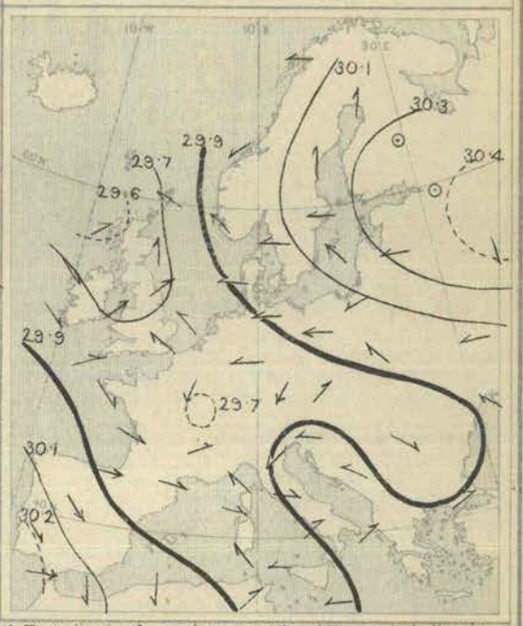
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning very fine and bright over Scandinavia, as well as over the Netherlands, the greater part of England, Austria, and some parts of the Mediterranean; cloudy and changeable elsewhere, with showers in the west of our Islands, steady rain over the western half of France, and at several stations over the Peninsula, the Mediterranean, and southern Russia. Much rain later over France, southern and south-eastern Europe later, and a considerable quantity in the extreme east and south-east of England; showers in west and north-west of our Islands.

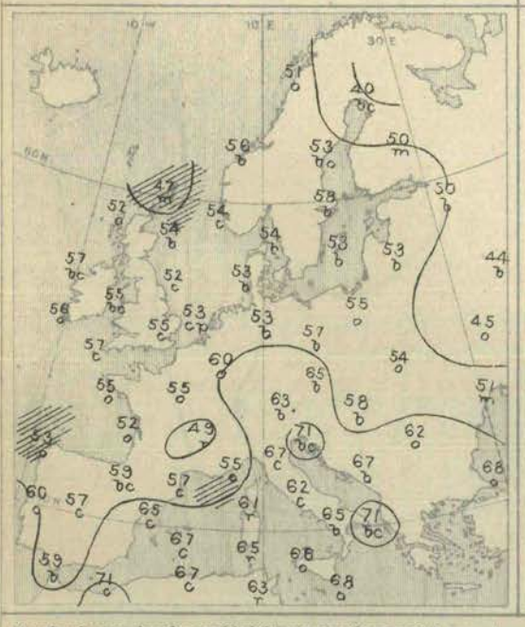
Temperature highest, 73° at Brindisi, Algiers, Oran, and Barcelona, and exceeding 60° at most of the Mediterranean stations and in Austria; 60° at Munich and Wiesbaden, and above 50° except at the most northern stations. Lowest, 28° at Archangel, 38° at Haparanda, 42° at Moscow, 45° at Kharkov, and 48° at Sumburgh Head. Rising later to between 60° and 68° over Great Britain, to between 70° and 77° in many parts of France, Germany, and Italy, and to somewhat higher values on the Algerian coasts, and to 86° at Laghouat.

Wind (1) North-Easterly to South-Easterly over the northern countries of Europe, including the Shetland Isles and north of Ireland; (2) South-Westerly to Southerly over the south of Ireland, the Channel, and England; (3) Westerly to North-Westerly over the Peninsula; (4) light and variable over the Mediterranean, central, south-eastern, and eastern Europe. Freshening from East over the Baltic and Germany later, shifting to North-West over the Bay of Biscay and the west of Ireland, and becoming Southerly in Scotland, but becoming Easterly over the extreme south-east of England.

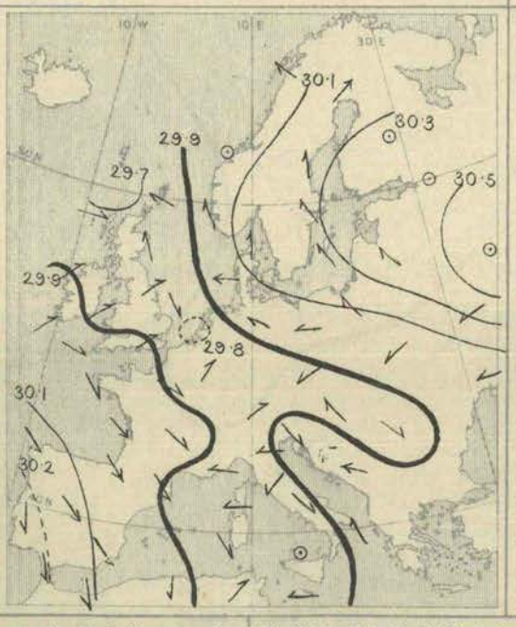
Barometer highest, (1) 30·3 ins. and more to 30·0 ins. over Russia, Finland, the Baltic, and Scandinavia; (2) 30·1 ins. and more to 30·0 ins. over the south-western parts of the Spanish Peninsula; (3) 30·0 ins. and more over Greece and the south of Italy. Lowest, about 29·5 ins. off our extreme north-west coasts; below 29·8 ins. over the south-west of France, and below 29·9 ins. over Poland, western Russia, and Hungary. Shallow but well-marked depression forming over France and the north-east of Ireland later, but barometer rising decidedly on our west and south-west coasts and slightly over central Russia.

Monday, 22nd May.

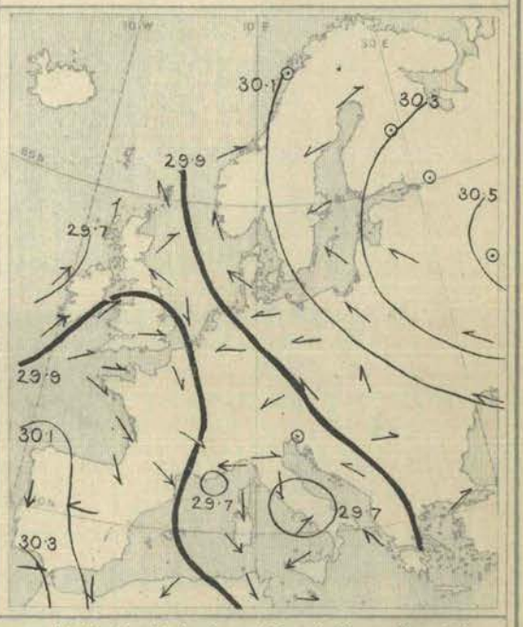
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over northern and the greater part of central Europe, and locally over several of the northern and central parts of our Islands; cloudy and unsettled over the south-east of England, with rain at some coast stations, dull and rainy in the south of France, the north-east of Spain, and over a great deal of the Mediterranean. Rain in the north and west of our Islands later, and a heavy fall in the south of France, Italy, the Riviera, and Corsica; thunderstorms at Algiers. Sky clearing very quickly over the south-east of England—very fine in London.

Temperature in morning highest, 71° at Brindisi and Trieste, 60° and more over the Mediterranean and coasts of Spain, Italy, and south-eastern Europe, as well as over the west and south of Germany, and exceeding 50° in almost all other countries. Lowest, 40° at Haparanda, 44° at Moscow, 45° at Hangö, 47° at Sumburgh Head. Rising later to between 60° and 73° over England, 75° to 79° over Germany, and 80° and more in the south of Italy, but failing to reach 65° over the major part of France.

Wind (1) mainly North-Westerly over the Iberian Peninsula and Bay of Biscay; (2) mainly Easterly to South-Easterly over the northern half of Europe; (3) very variable in small and cyclonic circulations over the British Islands, western Germany, the south of France, Italy, and the Mediterranean. Becoming South-Westerly to Southerly over Ireland and Scotland during day, and backing to Westward in London; cyclonic circulation over Italy and the south of France.

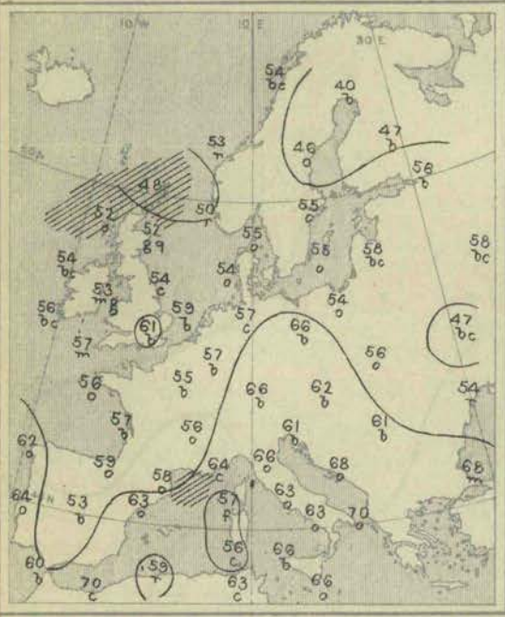
Barometer highest, (1) 30·5 ins. and more to 30·0 ins. over Russia, the Baltic, Scandinavia, and Germany; (2) 30·2 ins. and more to 30·0 ins. over the Peninsula and the Bay of Biscay. Lowest, about 29·7 ins. over the north of Lewis (Hebrides); about 29·8 ins. off the east coast of England: rather below 29·8 ins. over the Riviera; and rather below 29·7 ins. at Malta. Falling decidedly in Ireland later, rising over England and France; but depression over Riviera growing deeper and another appearing near Rome.

Judd & Co Lt. Lith 63, Carter Lane

Tuesday, 23rd May.

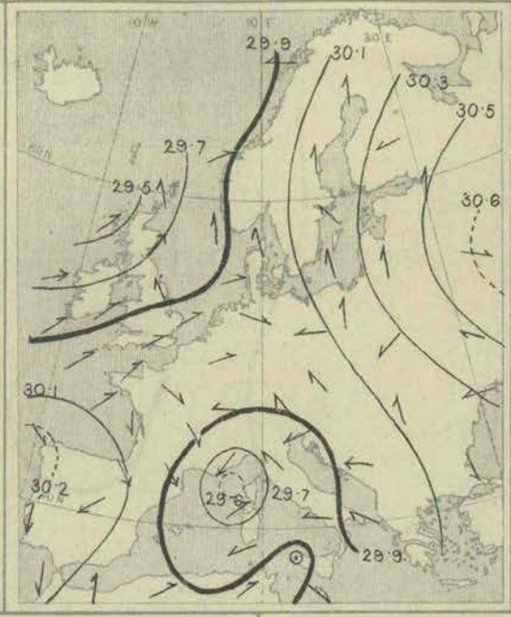
Temperature and Weather.

8 a.m.

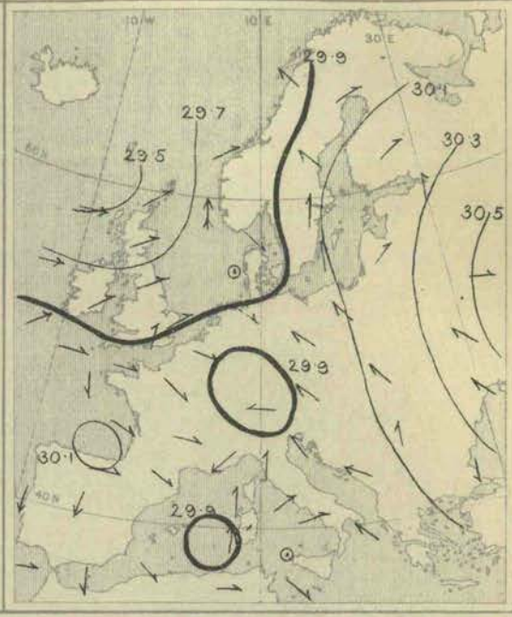


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning fine and bright over Finland, and the greater part of Russia, Germany, France, and Spain; cloudy over the north-western countries, with rain in several places, cloudy over the Mediterranean and Black Sea also, rainy at Algiers, Turin, and Odessa. Considerable rain over the southern parts of France, Switzerland, and Hungary later, and showers in many parts of the United Kingdom—chiefly in the west and north.

Temperature in morning highest, 70° at Oran and Brindisi, and exceeding 60° over southern Europe generally, as well as over Austria, western Germany, and in London. Lowest, (1) 40° at Haparanda, 46° at Hernösand, 47° at Kuopio, 48° at Sumburgh Head; (2) 45° at Kharkov, 47° at Kiev. Rising later to between 65° and 70° over many parts of England, to between 70° and 79° over the southern half of France, and in Italy, to 74° at the Helder, 79° at Munich, 84° at Berlin, and between 85° and 90° at some Algerian stations.

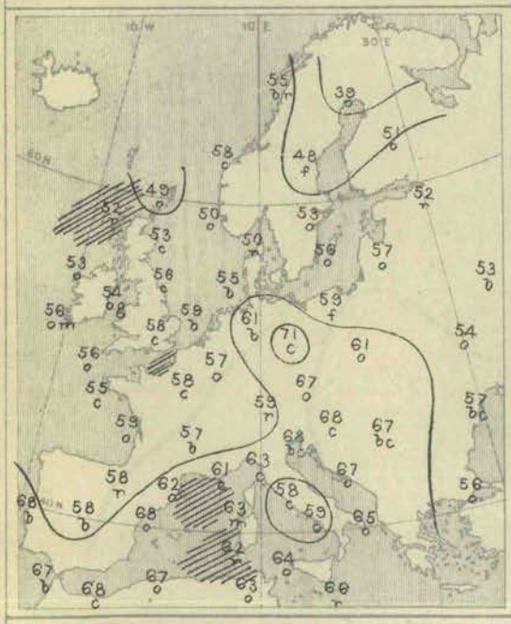
Wind (1) anticyclonic, Westerly to Northerly over the Iberian Peninsula, and North-Easterly in the south of France; cyclonic South-Westerly and variable over Algeria, South-Easterly to Easterly over Italy and the Adriatic; (2) cyclonic South-Westerly to Southerly over the British Islands, Southerly to Easterly over Norway; (3) anticyclonic Easterly to South-Easterly and very light over south-eastern and central Europe, South-Easterly to Southerly in the north. Veering towards West over the United Kingdom later.

Barometer highest, (1) 30·6 ins. to 30·0 ins. over the whole of Russia, Sweden, the Baltic, eastern Germany, Austria, Hungary, and the Balkan Peninsula; (2) 30·2 ins. to 30·0 ins. over the Spanish Peninsula, the Bay of Biscay, the west and north of France, and the English Channel. Lowest, (1) 29·5 ins. and less in a rather large depression having its centre somewhat to the north-westward of Stornoway; (2) 29·6 ins. and less in another over the northern parts of the Mediterranean. Rising a little over the United Kingdom later, falling over the North Sea, Germany, and the Baltic. Depression over south of France filling up.

Wednesday, 24th May.

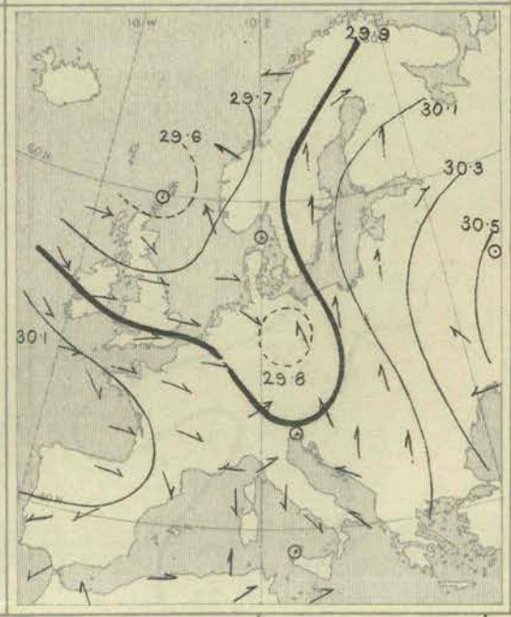
Temperature and Weather.

8 a.m.

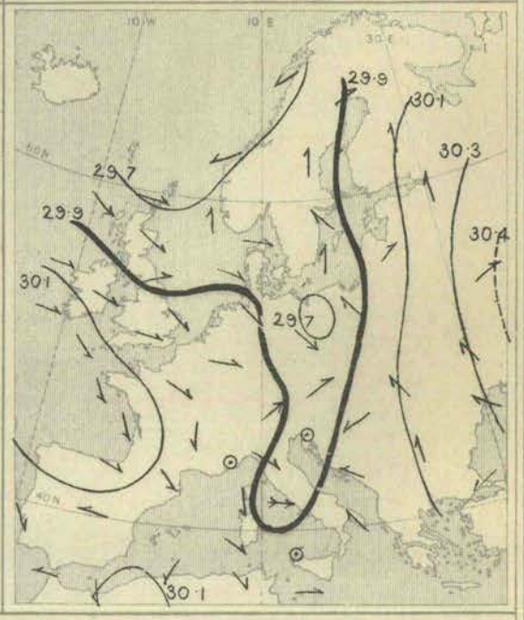


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning fine and bright over central Russia, as well as over the south of Spain, and at several stations in the east and south of England, cloudy or overcast in all other regions and somewhat unsettled. Rain falling over Finland, south Germany, and the Hebrides, as well as at Malta and Cagliari. Rain later over Norway and the northern parts of Scotland and Ireland, as well as over the southern parts of France, Germany, Austria, and some parts of Italy. Much cloud observed in London.

Temperature fallen somewhat over England, risen on the Continent. Mornings readings below 70° except at Berlin; exceeding 60° over southern and central Europe, and exceeding 50° except in the far north. Lowest, 39° at Haparanda, 43° at Hangö, 48° at Hernösand, and 49° at Sumburgh Head. Rising later to between 65° and 67° over many parts of England, France, and Germany, to 71° at Lyons, 77° at Limoges, in Spain, and some parts of Italy and Austria, 81° at Lisbon, and 82° at Berlin.

Wind (1) North-Westerly to Westerly over the British Islands, France, and the Bay of Biscay. North-Easterly over the Spanish Peninsula; (2) South-Easterly and Southerly over south-eastern, eastern, and northern Europe, with the Baltic; (3) variable over western Germany, Italy, and the greater part of the Mediterranean. Light to moderate in force generally, but strong at Stornoway, and increasing there to a gale from North-West about midnight. Shifting to North-West at Swinemünde and Berlin, but remaining Southerly over Russia.

Barometer highest, 30·5 ins. and more to 30·0 ins. over Russia, Poland, and Hungary; 30·1 ins. and more to 30·0 ins. over the Spanish Peninsula, the west of France, and the extreme south-west of our Islands. Lowest, 29·6 ins. and less over the Orkneys, Shetlands, and their neighbourhood; 29·8 ins. and less over west and south Germany, and below 30·0 ins. over Italy, Corsica, Sardinia, and the greater part of the Mediterranean. Rising over western Europe later, falling over the Baltic; depression over Germany moving north-eastwards.

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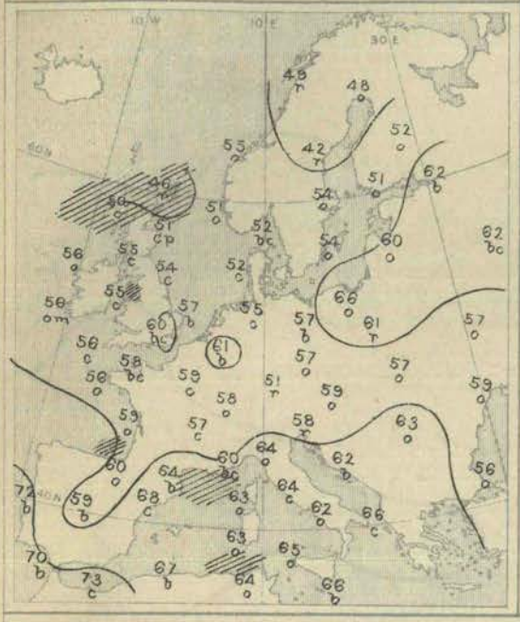
Thursday, 25th May.

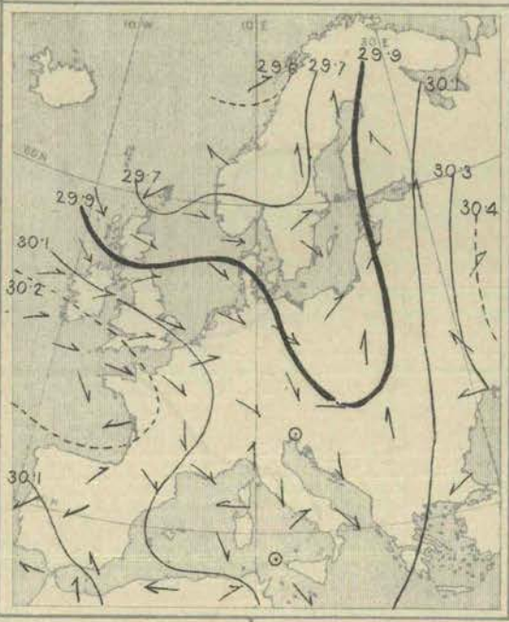
Temperature and Weather.

8 a.m.

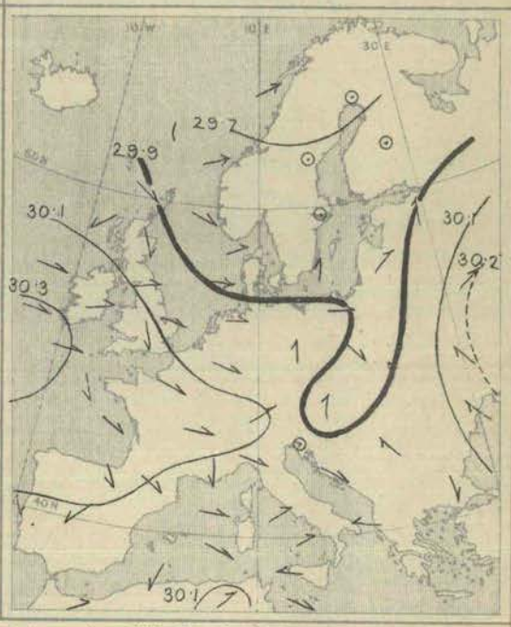


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning fine and bright (1) over Russia, (2) over some parts of the British Islands and north Germany, as well as over the southern half of Spain and Algeria—cloudy elsewhere, changeable and somewhat unsettled in places, rain at several northern stations and Munich. Rain later over Finland, Scandinavia, the Shetlands, and Hebrides, a very slight fall at Parsonstown, and a considerable fall at Munich, as well as over Austria-Hungary and Poland; fog on our south-western coasts.

Temperature risen again over eastern Europe, fallen over Germany and Austria. Morning readings highest, 73° at Oran and Sfax, and exceeding 60° over southern Europe, Hungary, Poland, and many parts of Russia; above 50° in most other places, but, lowest, 42° at Hernösand, 46° at Sumburgh Head, 48° at Haparanda, and 49° at Bodö. Rising later to between 65° and 73° in many parts of Great Britain, Germany, and France, to rather higher value over Italy, to 86° at Oporto, and to between 75° and 85° over Algeria.

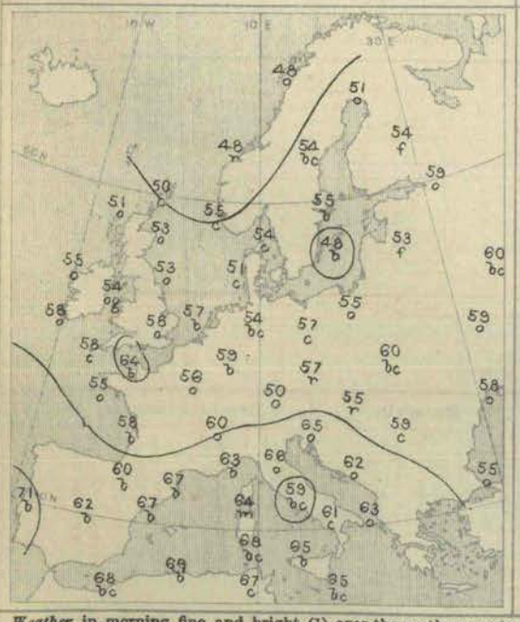
Wind (1) North-Westerly to Westerly over the British Isles, the North Sea, Germany, the south of Sweden and France—strong at the Scotch stations, North-Easterly over Spain; (2) Southerly over Hungary, Poland, and Russia, South-Easterly to South-Westerly over the Baltic and Gulf of Bothnia. Veering to North-East at Stornoway later, blowing strongly from North-West in the east of Scotland, shifting to West and South-West in Norway, and to North-East in the south of France.

Barometer highest, (1) 30·4 ins. and more to 30·6 ins. over Russia and Hungary; (2) 30·2 ins. and more to 30·0 ins. over Ireland, England, and the western parts of the Continent generally, with neighbouring portions of the Atlantic. Lowest, (1) 29·6 ins. and less to 29·7 ins. over Finmark, the northern half of Norway, and the Shetland Isles: (2) 29·8 ins. and less over the Baltic and part of north Germany, and (3) 30·0 ins. and less over the northern parts of Italy and the Mediterranean. Rising later decidedly in the north of our Islands, slightly in Norway, falling over the Baltic and Russia.

Friday, 26th May.

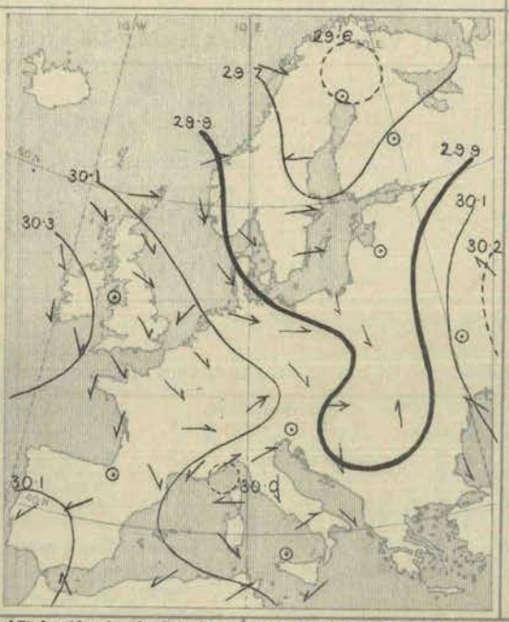
Temperature and Weather.

8 a.m.

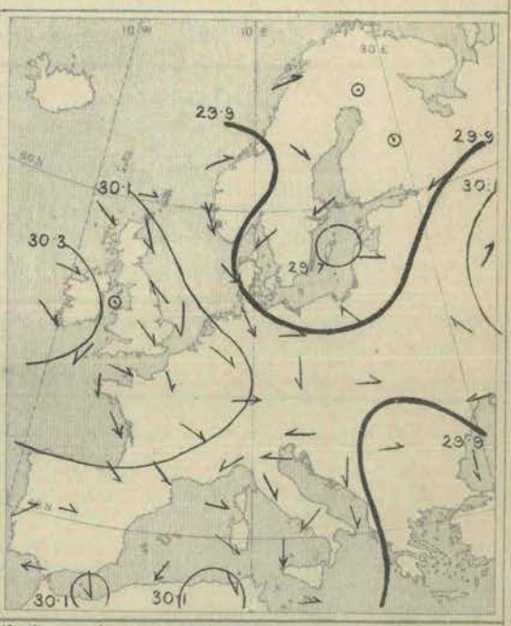


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning fine and bright (1) over the southern parts of Italy, Algeria, the Spanish Peninsula, the west and north of France, and some parts of our south-western and southern counties, (2) at Moscow and on the Swedish coast. Cloudy or overcast elsewhere, with rain at Christiansund and over Poland and Austria; fog over Finland and the Gulf of Riga. Considerable rain later both over the northern parts of Scandinavia and in the south of France, and smaller quantities over Germany, western Russia, Finland, and the north of our Islands.

Temperature fallen decidedly over Austria, eastern Germany, Poland, and the Baltic Provinces. Morning readings exceeding 60° at most stations in southern Europe, and at some of the English Channel stations, just 60° at Lemberg and Moscow—lower elsewhere. Lowest, 43° at Kuopio, 48° at Bodö, Wisby, and Helsingfors. Not touching 50° during day in the north-west of Norway, or 70° over Great Britain, Ireland, or Germany, but reaching 70° to 79° in the west and south of France, and in Italy, and 81° at Lisbon, 86° at Madrid, and 90° to 97° over central Algeria.

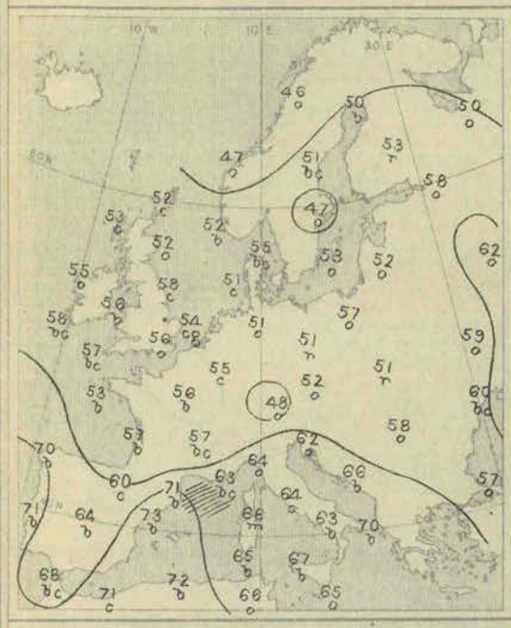
Wind (1) North-Westerly to Northerly over the whole of the British Isles, north-western and central Europe, and North-Easterly over Spain; (2) Southerly (very light and variable) over Hungary, Russia, and Finland, Westerly over the Baltic. Light to moderate in force in most places, strong on the eastern shores of the North Sea. Shifting temporarily to North-East in the south of England later, and increasing in force from North-West on the eastern shores of the North Sea.

Barometer highest, (1) 30·3 ins. to 29·9 ins. over central, southern, and western Russia; (2) 30·3 ins. and more to 30·0 ins. over the British Islands, western and south-western Europe. Lowest, 29·6 ins. and less over the east of Lapland, and about 29·8 ins. over Poland and Austria-Hungary. Rising later over Norway and the north of the British Isles, falling slightly over France and considerably over Russia. Russian anticyclone giving way.

Saturday, 27th May.

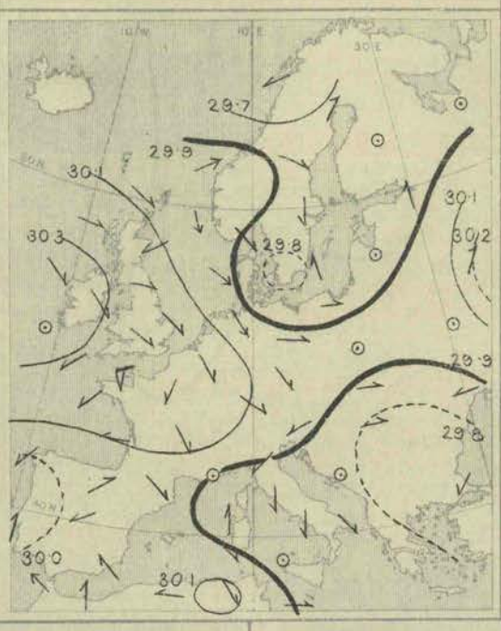
Temperature and Weather.

8 a.m.

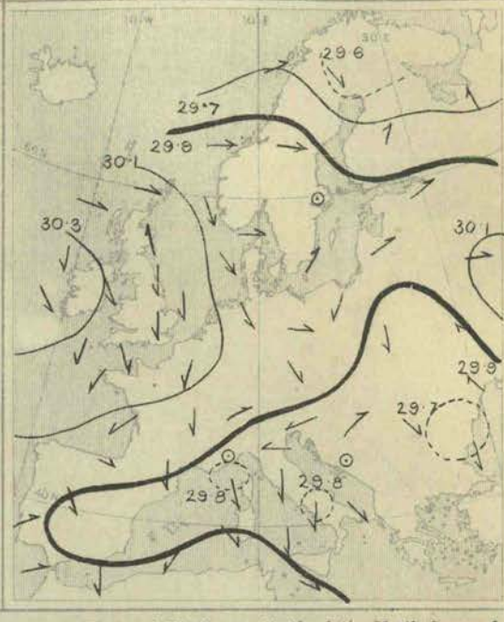


Barometer and Wind.

8 a.m.



8 p.m.



Weather in morning fine and bright over the southern side of the Mediterranean, the Peninsula, the greater part of France, and the south-western counties of England, as well as in some parts of Russia and Scandinavia, cloudy or overcast elsewhere, with rain at Helsingfors, and at Lemberg. Some rain later at Christiansund, and in the north and east of Scotland, as well as at Nice and in some parts of Germany, large quantities in many parts of Italy, but sky clearing over Ireland and England.

Temperature in morning, 72° at Algiers, 71° at Lisbon, 70° at Brindisi and Corunna, and above 60° over the southern countries of Europe generally, as well as over central Russia; above 50° in most other places. Lowest, 46° at Bodö, 47° at Christiansund and Stockholm, 48° at Hangö. Rising to between 60° and 65° over the United Kingdom later (71° at Leith), and to between 70° and 81° in the west and south of France and the south of Italy; to 90° at Palma and to 95° at Biskra (Algeria).

Wind light to moderate from between West and North over Scotland, the North Sea, and Germany, North-Easterly in the English Channel, North-Easterly and Easterly over the Bay of Biscay and Spain; South-Westerly over the Baltic Provinces, Southerly over northern Russia, but Easterly over the south of Russia, and very variable over south-eastern Europe and Italy. Strong South-Westerly breeze on the north-western coasts of Norway, North-Westerly on the Danish coast during day, and a North-Westerly breeze over Corsica, Sardinia, and the south of Italy.

Barometer highest, (1) 30·3 ins. and more to 30·6 ins. in an anticyclone spreading in from the Atlantic over the British Islands, the North Sea, Spain, France, and western Germany; (2) 30·2 ins. and more to 33·0 ins. over central Russia. Lowest, (1) 29·7 ins. and less over Lapland, and in a small depression at the mouth of the Gulf of Bothnia; (2) 29·8 ins. and less in another small disturbance over the south of Sweden, and in a larger system over the Balkan Peninsula. Depression in far north growing deeper later and moving eastwards.

GENERAL NOTES.

During the earlier part of this week pressure was highest over Russia, lowest over the British Islands and the neighbouring parts of the Atlantic, and showery weather prevailed, first over north-western Europe and afterwards over southern and south-eastern Europe also. After Tuesday, however, the Russian anticyclone began to give way, while a new system spread over our Islands and western Europe from the south-westward. The drought has, consequently, been renewed over the British Isles and especially over England, and at the close of the week Northerly breezes had become general over western Europe, and appeared likely to continue, with decreasing temperature.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 122.

Stations.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	Stations.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	40·5	?	35	?	EASTBOURNE	42·3	?	38	?
OSWALDKIRK (Yorkshire)	37·3	?	33	?	TENBY	55·4*	?	50*	?
WORKSOP	39·5	+ 0·1	35	0	NEWQUAY	44·3	?	41	?
THURCASTON (Leicestershire)	47·5	+ 6·5	42	+ 7	TORQUAY	47·6*	?	44*	?
MARGATE	42·5	?	39	?	ARLEY COTTAGE (County Cavan)	21·2	?	19	?
WESTBOURNE (Sussex)	54·0*	?	49*	?	GUERNSEY	70·9*	?	66*	?
BRIGHTON	47·9	?	44	?					

* The values at Westbourne, Tenby, Torquay and Guernsey are obtained by Jordan's Photographic Recorder.

REPORTS received too late for insertion in their proper places.

Date of Report.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-Degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°	°	°		Inches.	Inches.				
April 8th, 1893.	Edgeworthstown	65	31	59·4	36·0	47·1	+4·4	61	17	0	—	-0·57	—	—	—	—
,, 22nd, ,,	Glencarron	74	31	59·2	40·0	49·2	+5·8	59	6	4	0·13	-0·84	—	—	—	—
,, ,, ,,	Edgeworthstown	68	41	62·1	46·7	54·0	+8·5	84	0	3	0·70	+0·17	—	—	—	—
,, ,, ,,	Waterford	68	45	60·9	47·4	53·8	+5·9	83	0	4	0·62	+0·02	—	—	—	—
,, ,, ,,	Manchester	—	—	—	—	—	—	—	—	—	—	—	39·1	?	40	?
May 6th, ,,	Ochtertyre	67	32	59·9	41·3	50·0	+4·5	59	2	2	0·10	-0·45	—	—	—	—
,, ,, ,,	Scarborough	57	38	54·5	41·0	47·4	+0·3	42	3	3	0·73	+0·31	—	—	—	—
,, 20th, ,,	Newquay	—	—	—	—	—	—	—	—	—	—	—	25·5	?	24	?

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WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W. R. H. SCOTT, F.R.S., SECRETARY.

By whom Subscriptions, payable in advance, can be received.

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VOL. X. No. 22.] *Third Series.* WEEK ENDING SATURDAY, 3RD JUNE, 1893. [*Price 6d.* [*Annual Subscription, post paid, £1 10s. 0d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871-90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the twenty-five years 1866-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90 only BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the ten years 1881-90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

	DISTRICTS. (See p. 122.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 1st, 1893. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	69	32	56·7	44·2	50·1	0 (average)	57	+ 5	0	− 3	630	+240	485	− 56
	1. SCOTLAND, EAST	73	30	60·1	44·0	51·6	1 above.	67	− 2	0	− 2	729	+197	548	− 21
	2. ENGLAND, N.E.	70	37	59·0	45·7	52·0	0 (average)	70	− 1	0	− 2	751	+232	436	− 62
	3. ENGLAND, EAST	73	34	62·2	42·2	51·6	2 below.	67	−19	0	− 2	943	+278	524	− 37
	4. MIDLAND COUNTIES	73	33	64·7	43·5	53·4	0 (average)	80	− 5	0	− 1	1056	+367	505	− 47
	5. ENGLAND, SOUTH	75	33	63·5	46·2	54·3	0 (average)	86	− 5	0	0	1056	+309	373	− 43
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	67	34	61·4	44·8	52·6	1 above.	74	+ 2	0	− 1	822	+269	354	− 62
	7. ENGLAND, N.W.	70	33	61·4	46·9	53·7	1 above.	82	+ 4	0	0	928	+349	323	− 91
	8. ENGLAND, S.W.	73	34	65·1	47·9	56·5	2 above.	98	+16	0	0	1101	+387	246	− 70
	9. IRELAND, NORTH	70	33	61·5	48·1	54·4	2 above.	87	+12	0	0	938	+293	258	−104
	10. IRELAND, SOUTH	70	39	64·2	48·6	55·9	2 above.	97	+15	0	0	1113	+334	178	−100
	—CHANNEL ISLANDS	68	43	64·7	51·3	57·6	3 above.	109	+20	0	0	1260	+439	70	− 52

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 122.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the mean for the Week.	From Jan. 1st, 1893. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 1st, 1893. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	3	2	5 less.	95	− 7	17·1	− 2·3	25	− 23	21	− 19	453	− 56	25	− 3
	1. SCOTLAND, EAST	3	3	2 less.	76	− 6	8·4	− 3·4	35	− 17	29	−16	590	+ 13	32	0
	2. ENGLAND, N.E.	3	3	1 less.	62	−15	6·7	− 2·8	28	− 15	24	−11	670	+154	37	+ 9
	3. ENGLAND, EAST	3	2	3 less.	62	−13	6·2	− 3·1	46	0	40	0	802	+183	44	+ 10
	4. MIDLAND COUNTIES	2	1	4 less.	62	−11	6·8	− 3·8	34	− 9	30	− 7	757	+213	41	+ 11
	5. ENGLAND, SOUTH	1	1	4 less.	58	−14	6·8	− 3·7	47	− 3	42	− 3	820	+240	45	+ 13
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	2	1	6 less.	79	− 9	13·8	− 6·0	56	+ 11	48	+10	645	+ 88	35	+ 5
	7. ENGLAND, N.W.	1	2	3 less.	66	−14	8·8	− 3·4	43	− 1	37	− 1	648	+100	35	+ 5
	8. ENGLAND, S.W.	1	less than ½	5 less.	62	−20	10·6	− 4·9	57	+ 6	51	+ 5	858	+213	47	+ 12
	9. IRELAND, NORTH	2	2	3 less.	80	−12	10·7	− 2·9	33	− 6	29	− 5	527	− 24	29	− 1
	10. IRELAND, SOUTH	2	2	3 less.	70	−17	11·7	− 4·1	46	0	40	0	636	+ 8	35	+ 1
	—CHANNEL ISLANDS	1	less than ½	4 less.	68	−21	8·8	− 4·0	77	+ 25	70	+23	986	+227	54	+ 12

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather became somewhat unsettled soon after the commencement of the period, and some rain was experienced in almost all districts; in some localities the fall was accompanied by thunder and lightning. By Wednesday, however, the conditions had again become fine and dry, and continued so throughout the remainder of the week.

Temperature did not differ materially from the normal, being slightly below it in some of the "Wheat producing" districts, and rather above it in the "Grazing districts." The highest of the maxima were recorded either at the beginning or end of the period, and ranged from 75° in England S., and 73° in most other English districts, to 68° in the Channel Islands, and 56° in Scotland W. The lowest of the minima were registered during the middle or latter half of the week, when the thermometer fell to 30° in Scotland E. (at Braemar), to 32° in Scotland N., and to 33° in several English districts and Ireland N. In Ireland S. the minimum was 39° and in the Channel Islands 43°.

Rainfall was less than the mean in all districts; over central, southern, and south-western England the fall was very slight, and at several stations there was none.

Bright Sunshine was fairly abundant in most of the southern, south-western, and south-eastern districts, and also in Scotland W., rather deficient elsewhere. The percentage of the possible duration ranged from 21 to 48 in Scotland, from 29 to 40 in Ireland, and from 24 to 51 in England. In the Channel Islands, however, the percentage was as high as 70.

Barometer and Wind.—During nearly the whole of the period the eastern part of a large anticyclone stretched over our Islands from the Atlantic. No depressions appeared directly over us, but one or two very shallow systems (subsidiary to larger depressions over Scandinavia) moved over the North Sea in close proximity to our north-eastern and eastern coasts. Northerly to North-Westerly winds of little strength were most prevalent over the United Kingdom, but towards the end of the week, when the high-pressure had moved eastwards, they became Southerly in the west and north, and Easterly in the south and east.

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II.—DATA from which the SUMMARY on page 127 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°				Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head §	54	38	51·0	41·6	46·0	− 1·4	30	1	3	0·03	−0·39	*	*	*	*
	Stornoway	61	44	55·6	46·0	50·5	+ 1·4	60	0	3	0·11	−0·53	19·0	−22·5	16	−19
	Wick	58	32	54·9	43·1	48·7	− 0·9	47	0	3	0·24	−0·15	*	*	*	*
	Lairg §	64	38	57·1	43·4	49·8	− 0·6	55	0	4	0·41	−0·09	*	*	*	*
	Glencarron §	65	40	58·5	43·5	50·6	+ 1·1	60	0	4	0·21	−0·93	*	*	*	*
	Fort Augustus §	69	41	60·2	46·8	53·1	+ 2·1	78	0	2	0·07	−0·39	23·5	?	20	?
	Fort William §	63	39	59·5	45·1	51·9	+ 0·1	69	0	2	0·13	−0·75	32·0	?	27	?
1. SCOTLAND, E.	Nairn	65	38	58·7	44·4	51·1	− 0·6	64	0	3	0·20	−0·20	*	*	*	*
	Aberdeen	64	41	57·1	46·0	51·2	+ 0·3	64	0	5	0·39	−0·03	27·8	−18·4	23	−16
	Braemar §	65	30	56·9	39·9	47·9	− 1·0	50	6	2	0·14	−0·37	38·8†	?†	32†	?†
	Ochtertyre §	71	41	65·3	44·7	54·4	+ 2·9	87	0	2	0·23	−0·35	*	*	*	*
	Leith §	73	43	63·0	46·3	54·2	+ 1·6	85	0	2	0·62	+0·27	*	*	*	*
	Marchmont §	69	38	59·4	42·7	50·6	− 0·2	60	0	3	0·24	−0·29	41·8	?	35	?
2. ENGLAND, N.E.	Alnwick Castle	66	39	57·6	45·4	51·1	+ 0·6	64	0	5	0·12	−0·28	*	*	*	*
	Durham	70	37	60·5	43·7	51·6	0·0	67	0	4	0·44	0·00	24·5	−15·9	21	−13
	Shields	67	40	58·1	46·7	52·1	+ 0·9	71	0	3	0·10	−0·28	*	*	*	*
	Scarborough Mt	68	42	60·1	45·4	52·3	+ 0·3	72	0	4	0·24	−0·24	*	*	*	*
	York	69	40	62·1	46·3	53·7	+ 0·3	82	0	2	0·42	−0·05	31·9	− 9·1	28	− 9
	Spurn Head	58	43	55·3	46·9	50·9	− 1·8	62	0	2	0·40	+0·02	*	*	*	*
3. ENGLAND, E.	Hillington Mt	71	36	63·7	40·3	51·3	− 2·4	72	5	3	0·11	−0·34	47·3	− 0·5	41	0
	Yarmouth	60	41	57·1	46·1	51·3	− 1·4	65	0	4	0·10	−0·30	*	*	*	*
	Geldeston	66	35	59·7	40·2	49·4	− 4·1	59	5	3	0·20	−0·20	55·4	+ 3·0	49	+ 4
	Cambridge	73	36	66·3	42·9	53·9	− 0·7	83	0	2	0·35	−0·15	42·7	− 3·5	38	− 3
	Rothamsted	70	34	64·4	41·6	52·3	− 1·1	74	1	1	0·12	−0·35	37·2	?	33	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	72	38	63·9	45·3	54·0	0·0	84	0	2	0·45	−0·05	*	*	*	*
	Loughborough	73	34	65·7	42·7	53·5	− 1·2	81	0	2	0·09	−0·41	*	*	*	*
	Stamford (Ketton Hall)	73	36	66·1	42·1	53·4	− 1·3	80	0	2	0·11	−0·37	*	*	*	*
	Cheadle Mt	66	39	61·4	44·4	52·4	+ 0·7	73	0	1	0·25	−0·36	*	*	*	*
	Churchstoke Mt	69	33	64·0	41·6	52·1	0·0	72	1	2	0·04	−0·47	39·8	− 3·3	35	− 3
	Hereford Mt	72	36	66·6	44·6	54·9	+ 0·3	90	0	1	0·04	−0·46	*	*	*	*
	Cirencester	70	36	64·6	43·1	53·2	+ 0·1	78	0	1	0·02	−0·48	33·6	−12·2	30	−10
	Oxford	71	35	65·0	43·9	53·8	− 0·7	83	0	1	0·01	−0·48	32·5	−12·5	29	−11
5. ENGLAND, S.	London	72	39	65·3	44·6	54·3	− 1·3	86	0	2	0·18	−0·29	36·8†	− 6·6†	33†	− 6†
	North Foreland	62	43	58·0	48·0	52·7	− 1·0	75	0	2	0·05	?	*	*	*	*
	Strathfield Turgiss Mt	74	33	67·1	41·3	53·4	− 1·0	83	2	1	0·02	−0·38	*	*	*	*
	Dungeness	63	37	60·4	45·4	52·5	− 2·2	74	0	2	0·08	−0·32	*	*	*	*
	Hastings (St. Leonards)	63	43	60·2	46·4	52·9	− 2·2	76	0	1	0·27	−0·15	57·7	+ 2·7	52	+ 2
	Southampton	75	40	68·3	47·7	57·4	+ 1·6	108	0	0	—	−0·48	43·5	− 5·9	39	− 4
	Hurst Castle	67	45	63·7	50·1	56·5	+ 1·5	102	0	1	0·01	−0·39	*	*	*	*
	Stowell Mt	69	39	65·2	46·0	55·0	+ 1·1	91	0	1	0·05	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	64	40	59·7	45·4	52·1	+ 0·1	71	0	3	0·13	−0·88	*	*	*	*
	Glasgow	67	43	62·8	46·3	54·1	+ 1·8	85	0	2	0·18	−0·38	37·9	+ 1·5	32	0
	Ardrossan	65	42	60·6	46·1	52·9	+ 0·4	76	0	2	0·04	−0·53	*	*	*	*
	Glenlee §	67	34	62·5	40·6	50·9	− 0·6	68	4	1	0·07	−0·61	*	*	*	*
	Douglas (Isle of Man)	66	42	61·3	45·5	52·9	+ 0·8	76	0	0	—	−0·50	74·0	+22·6	64	+20
7. ENGLAND, N.W.	Newton Reigny	70	33	62·2	42·5	51·8	+ 1·3	69	0	1	0·08	−0·40	40·1	− 6·9	34	− 9
	Stonyhurst	67	43	61·1	46·4	53·3	+ 0·3	79	0	2	0·89	+0·22	31·0	−14·0	27	−12
	Blackpool Mt	66	44	61·2	48·9	54·7	+ 1·6	89	0	1	0·06	−0·44	46·7	+ 0·7	41	+ 1
	Manchester	68	43	63·2	46·4	54·3	+ 1·6	86	0	2	0·24	−0·39	33·2†	?	29†	?
	Liverpool Obsy. (Bidston)	68	44	61·1	49·1	54·7	+ 0·4	89	0	2	0·18	−0·24	*	*	*	*
	Llandudno Mt	67	43	60·6	46·6	53·2	− 1·0	78	0	0	—	−0·40	63·2	+19·5	55	+16
	Holyhead	66	44	60·1	48·1	53·7	+ 0·2	82	0	0	—	−0·43	*	*	*	*
8. ENGLAND, S.W.	Llandovery	73	34	70·6	42·4	55·7	+ 1·5	96	0	0	—	−0·65	*	*	*	*
	Pembroke	66	46	61·9	49·3	55·2	+ 2·3	92	0	0	—	−0·45	74·5	+22·5	66	+20
	Bristol (Montpelier)	73	41	68·8	49·0	58·3	+ 4·0	114	0	2	0·13	?	*	*	*	*
	Arlington (N. Devon)	67	41	64·6	46·6	55·1	+ 2·7	92	0	0	—	−0·70	*	*	*	*
	Cullompton Mt	70	40	67·0	46·1	55·9	+ 2·2	97	0	1	0·09	−0·40	39·3	− 7·1	35	− 6
	Falmouth	68	48	65·0	49·8	56·9	+ 2·7	104	0	0	—	−0·59	54·7	+ 3·3	49	+ 2
	Plymouth	70	44	62·3	48·6	55·0	− 1·3	91	0	1	0·06	−0·38	54·0	+ 6·1	49	+ 6
	Prawle Point	66	48	60·9	51·4	55·9	+ 3·0	97	0	0	—	−0·34	*	*	*	*
9. IRELAND, N.	Malin Head	61	48	58·0	50·1	53·8	+ 0·6	83	0	2	0·06	?	*	*	*	*
	Londonderry	70	45	64·0	49·4	56·3	+ 2·3	100	0	2	0·40	−0·15	*	*	*	*
	Edenfel (Omagh)	66	40	60·9	47·9	54·0	+ 1·8	84	0	2	0·10	−0·47	*	*	*	
	Belmullet	66	48	61·0	51·0	55·7	+ 2·2	96	0	3	0·37	?	*	*	*	*
	Markree Castle	65	33	61·4	44·7	52·6	+ 1·2	74	0	2	0·15	−0·37	36·7	− 4·1	32	− 3
	Brookeborough	66	35	61·4	46·3	53·4	+ 1·2	80	0	2	0.18	−0·42	*	*	*	*
	Armagh	65	36	62·4	46·0	53·7	+ 1·3	82	0	2	0·27	−0·18	34·2	− 7·8	30	− 7
	Donaghadee	69	47	60·6	51·0	55·5	+ 2·9	95	0	1	0·01	−0·49	*	*	*	*
	Edgeworthstown	67	36	63·5	46·4	54·4	+ 2·0	87	0	1	0·33	−0·32	*	*	*	*
10. IRELAND, S.	Dublin	66	43	62·6	50·0	55·9	+ 1·6	97	0	2	0·19	−0·23	42·2	− 5·0	37	− 5
	Parsonstown	68	39	64·4	48·7	56·1	+ 2·7	99	0	1	0·21	−0·32	34·6	− 7·6	30	− 6
	Kilkenny	66	44	63·1	49·0	55·6	+ 2·0	95	0	2	0·34	−0·16	*	*	*	*
	Waterford	70	40	65·0	46·9	55·4	+ 1·3	94	0	3	0·16	−0·39	*	*	*	*
	Roche's Point	65	46	63·3	51·7	57·2	+ 2·6	106	0	1	0·25	−0·45	*	*	*	*
	Valencia	67	45	64·1	47·3	55·2	+ 1·2	92	0	2	0·40	−0·30	61·4	+13·5	54	+11
	Killarney	67	43	65·0	46·5	55·2	+ 2·0	92	0	2	0·21	?	*	*	*	*
	Foynes	68	45	65·9	49·0	56·9	+ 3·4	104	0	1	0·10	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	65	50	63·6	53·3	58·1	+ 3·8	113	0	1	0·01	−0·37	*	*	*	*
	Jersey	68	43	65·7	49·3	57·0	+ 1·6	105	0	0	—	−0·42	81·4	+25·0	74	+23

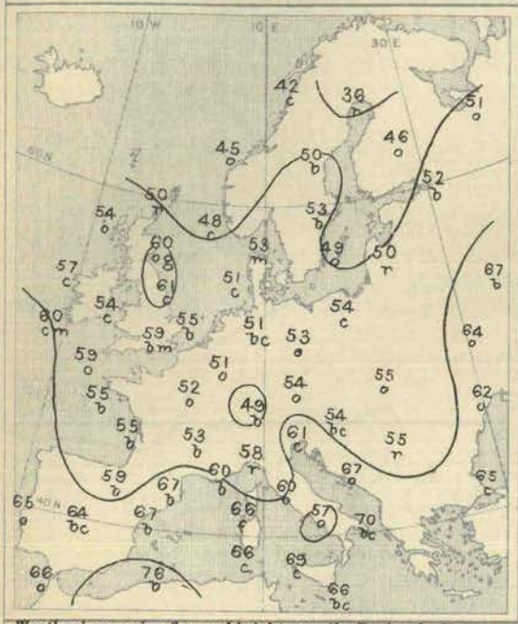
Stations marked Mt are in connection with the Royal Meteorological Society, and those marked § with the Scottish Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† The sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row) at the Kew Observatory, and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

Sunday, 28th May.

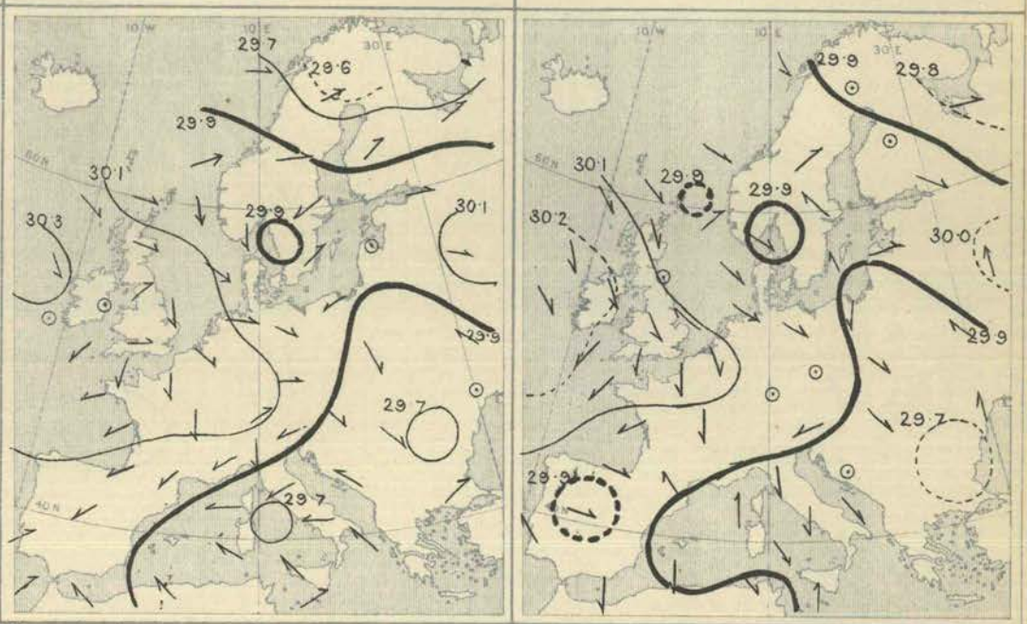
Temperature and Weather. — 8 a.m.



Weather in morning fine and bright over the Peninsula, France, southern and western Germany, the south of our Islands, central Russia, and many parts of Sweden, cloudy or overcast elsewhere, and unsettled over Scandinavia, central and south-eastern Europe. Rain falling at Haparanda, Riga, Hermanstadt, and Leghorn, fog still prevalent over the Gulf of Finland. Rain later in the north-west of Norway, the east of Scotland, and north-east of England (0·6 in. at Leith and 0·2 in. at Shields and York). Large quantities falling at Lemberg and Brindisi.

Temperature changing little and somewhat fitfully. Morning readings highest, 76° at Algiers, 70° at Brindisi, and above 60° over the Mediterranean, the coasts of south-eastern and south-western Europe, and central Russia; above 50° in most other places, but, lowest, 36° at Haparanda, 41° at Hangö, 42° at Helsingfors, 46° at Kuopio, 50° at Sumburgh Head. Rising later to between 65° and 71° in many parts of England and Ireland, not touching 65° over Germany, but exceeding 75° at several stations in the west and south of France. Remaining below 70° at some of the Italian stations, but reaching 91° at Madrid.

Barometer and Wind.

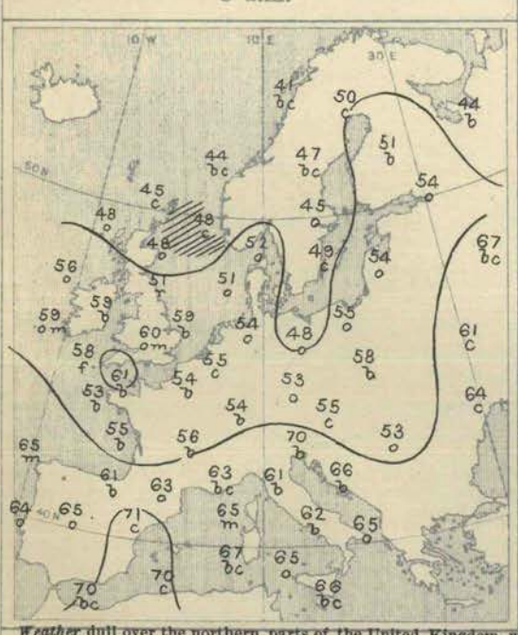


Wind (1) light and anticyclonic over north-western Europe—North-Westerly in Scotland, Northerly and variable over England, Easterly to Northerly over the Channel, France, the Bay of Biscay, and Spain; (2) anticyclonic South-Easterly over the south of Russia, South-Westerly and Westerly over Finland and at Moscow. Very variable elsewhere, but mainly cyclonic—Easterly and North-Easterly in the south of France, South-Easterly over the Adriatic, and on the Algerian coasts. No decided change in our Islands later, but backing Northward over the Channel.

Barometer highest, (1) 30·3 ins. to 30·0 ins. in an anticyclone stretching in from the Atlantic over our Islands, the North Sea and western Europe; (2) 30·1 ins. and more to 30·0 ins. over central Russia. Lowest, 29·6 ins. and less over Lapland and the Kola Peninsula; 29·7 ins. over Transylvania and Italy, and below 30·0 ins. over the Baltic, north Germany, Poland, south-eastern Europe, and the Mediterranean generally. Falling slightly and irregularly later over western Europe as a whole.

Monday, 29th May.

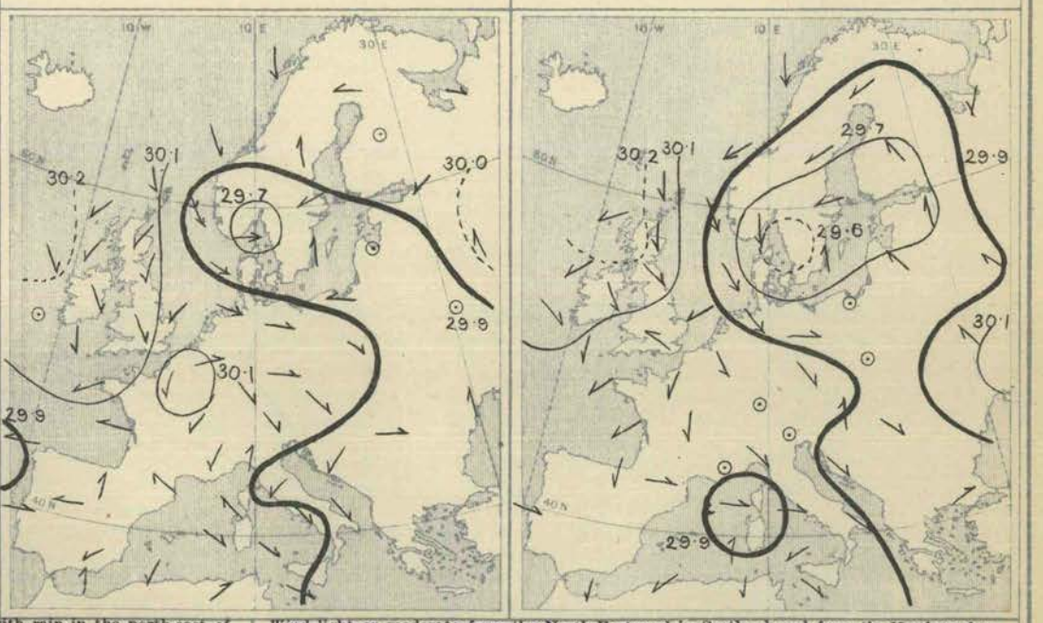
Temperature and Weather. — 8 a.m.



Weather dull over the northern parts of the United Kingdom, with rain in the north-east of England and also at Leith. Fine and bright in the extreme south of our Islands, as well as in France, Italy, Algeria, the north of Scandinavia, and the central parts of Russia. Dull over Finland, the Baltic, Denmark, Germany, and the south of Russia, with rain over the Gulf of Finland, as well as at Münster and Lemberg. Rain falling later in many parts of England and also over central Ireland; thunder and lightning occurring in London. Considerable quantities of rain falling in some parts of Austria and northern Russia.

Temperature fallen considerably over the northern parts of Great Britain, changed little and irregularly elsewhere. Morning readings highest, 71° at Barcelona, 70° at Trieste, Oran, Algiers, and Tunis, and 69° at Sfax; above 60° in most parts of southern Europe, as well as at some of the English Channel stations, and over the central and southern parts of Russia. Lowest, 41° at Bodö, 44° at Archangel and Christiansund, and 45° at Stockholm and Sumburgh Head; below 50° in the north and east of Scotland generally. Subsequently rising to between 65° and 72° over France and the inland parts of England.

Barometer and Wind.



Wind light or moderate from the North-Eastward in Scotland, and from the Northward or North-Westward over the greater part of Ireland and England, but rather variable on our extreme south-eastern coasts. Strong from the North-Westward on the eastern shores of the North Sea, with a gale at Skudesnaes, moderate from the Westward over Germany; Southerly in the south of Sweden; Easterly in Finland and the north of Sweden, Easterly or North-Easterly in France; variable in the north of Italy, Northerly or North-Westerly in the south of that country, Southerly in the south of Russia. Gale from the Northward springing up later over the Christiania Fiord.

Barometer highest, 30·2 ins. and upwards in an anticyclone lying to the westward of our Islands, 30·0 ins. and upwards in another system lying over the central parts of Russia. Lowest, 29·7 ins. and less in a well-marked depression lying over the south of Sweden; 29·8 ins. and less in a large shallow area extending northwards from the Black Sea to the Baltic Provinces. Small and very shallow disturbances forming later over the south-east of England. Swedish depression growing somewhat deeper and moving very slowly southwards.

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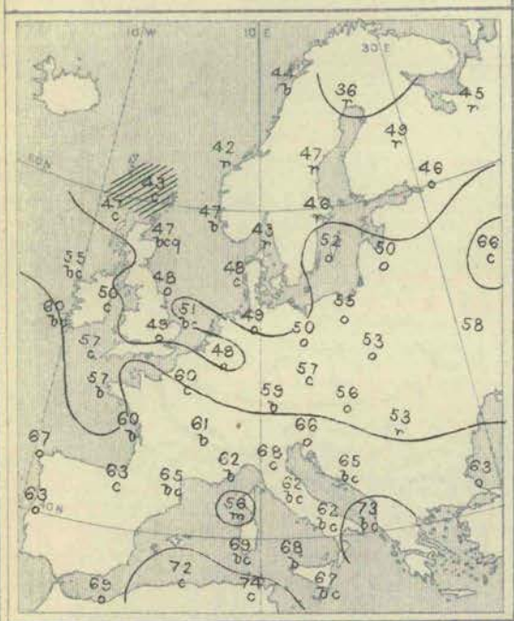
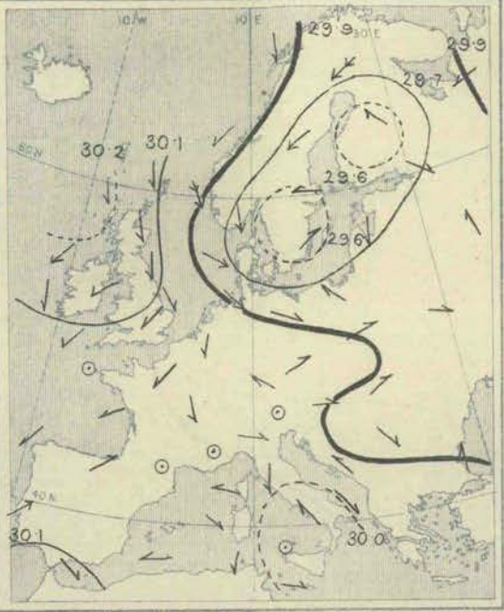
Tuesday, 30th May.

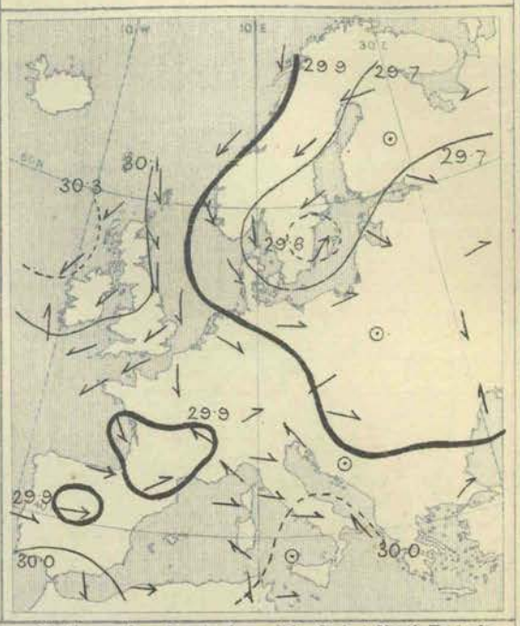
Temperature and Weather. — 8 a.m.



Barometer and Wind. — 8 a.m.



Barometer and Wind. — 6 p.m.



Weather fair or fine over the greater part of the United Kingdom, but dull in places, with showers at Spurn Head. Fine and bright in France and Italy, but cloudy or overcast in most other parts of the Continent, with rain at several of the Scandinavian stations. Showers falling during day in Scotland and the north of Ireland, as well as at some of the French, German, and Austrian stations, and heavy rain at Wiesbaden. Thunder and lightning occurring at Lyons.

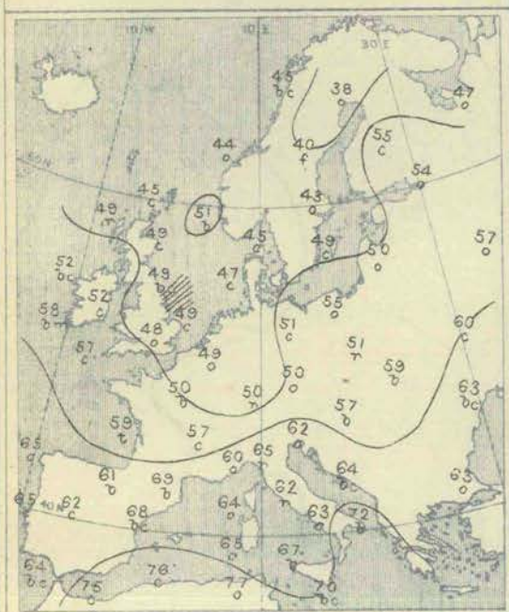
Temperature fallen over England and Ireland and also on the eastern shores of the North Sea, risen or changed irregularly elsewhere. Morning readings highest, 74° at La Calle, 73° at Brindisi, 72° at Algiers, and 69° at Cagliari and Nemours; above 60° in most parts of southern Europe and also over central Russia. Lowest, 36° at Haparanda, 40° at Faerder, 42° at Uleaborg and Christiansund and 43° at Skagen and Sumburgh Head. Rising during day to between 60° and 66° at most of our western stations, but remaining below 55° in the north and east of Great Britain. Exceeding 70° in most parts of France and southern Europe, and reaching 79° at Madrid.

Wind moderate from the Northward in the north and east of our Islands, but North-Easterly or Easterly in the west and south and also over the greater part of France. Strong to a gale from the North-Eastward over the northern parts of Sweden, and from the North-Westward in Denmark and the south of Norway; Westerly in Germany and Austria; Southerly at most of the Russian stations. Variable in Spain, Italy, and Algeria. No important change occurring over western Europe during day, but gales beginning to subside at the Scandinavian stations.

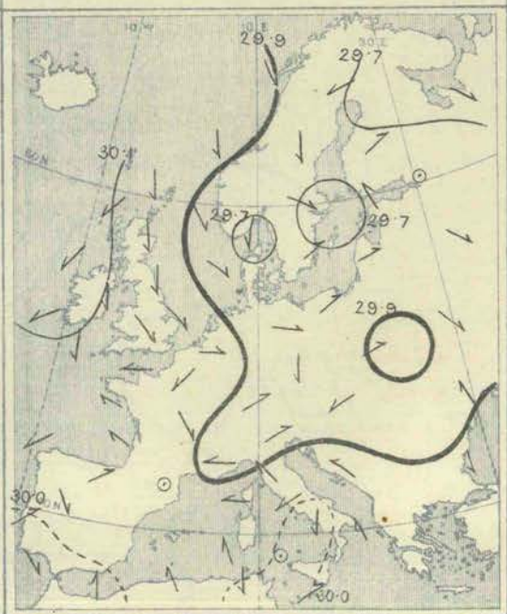
Barometer highest, 30·2 ins. and upwards in an anticyclone lying off our extreme north-west coasts, 30·1 ins. and upwards in another system lying over Morocco and the extreme south of Spain. Lowest, 29·6 ins. in two well-marked depressions, one lying over Finland and the other over the south of Sweden; gradient rather steep over Scandinavia and Denmark. Swedish depression partially filling up later, and disturbance over Finland entirely disappearing; no important change occurring over our Islands and France.

Wednesday, 31st May.

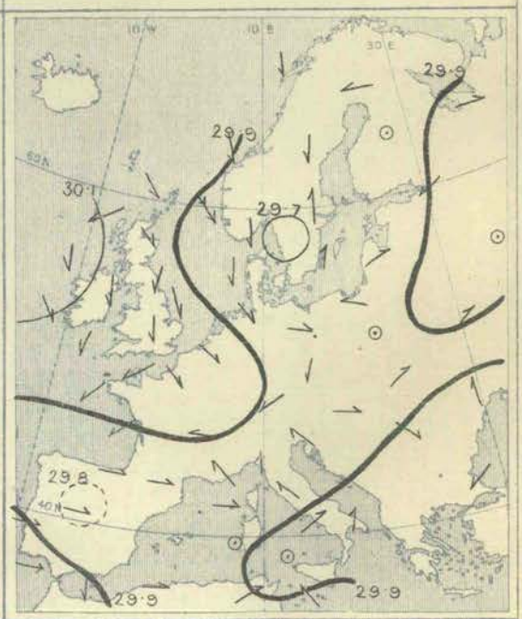
Temperature and Weather. — 8 a.m.



Barometer and Wind. — 8 a.m.



Barometer and Wind. — 6 p.m.



Weather fair over the greater part of western and northern Europe, but dull over central England and the north of Scotland, with rain at Stornoway. Dull in most of the central countries and also over the northern parts of Italy, with rain at Warsaw, Florence, and Rome. A little rain falling during day in the north of Scotland generally, and larger quantities over the southern parts of France and Germany, with thunderstorms in many places.

Temperature risen a little in the northern parts of the United Kingdom, as well as in Norway and the north of Russia, but fallen in most other localities. Morning readings highest, 77° at La Calle, 76° at Algiers, 75° at Oran, and 73° at Sfax; above 65° in many parts of southern Europe. Lowest, 38° at Haparanda, 40° at Hernösand, 42° at Wick, 43° at Stockholm, and 44° at Christiansund; below 50° in most of northern and eastern parts of Great Britain. Rising during day to 60° or a little above it in many parts of the United Kingdom, but remaining below 55° at some of our northern and eastern stations. Reaching 70° or more over nearly the whole of southern Europe, and touching 80° at Perpignan and 81° at Brindisi and Palermo.

Wind light or moderate from the Northward over the greater part of our Islands and Scandinavia, Easterly in France, variable over central and southern Europe. South-Westerly or Westerly at the Baltic stations, Southerly or South-Easterly over the Gulf of Finland, and also in the south of Russia. South-Easterly at most of the Algerian stations. Subsequently backing to the North-Westward in the north and east of Scotland, no important change occurring elsewhere.

Barometer highest, 30·1 ins. and upwards in a large anticyclone extending from the Atlantic over Ireland and the west of Scotland, 30·0 ins. and upwards in smaller systems lying respectively over the south of Italy and over Morocco and the extreme south of Spain. Lowest, 29·7 ins. and less in three depressions—one lying over Lapland, another over the northern part of the Baltic, and the third over the north of Denmark. Depressions filling up gradually during day, but shallow low pressure system spreading eastwards over the southern part of the Bay of Biscay and the south-west of France.

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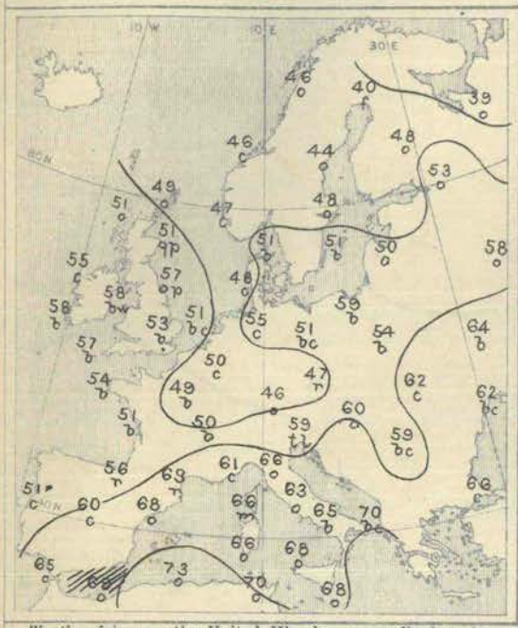
Thursday, 1st June.

Temperature and Weather.

8 a.m.

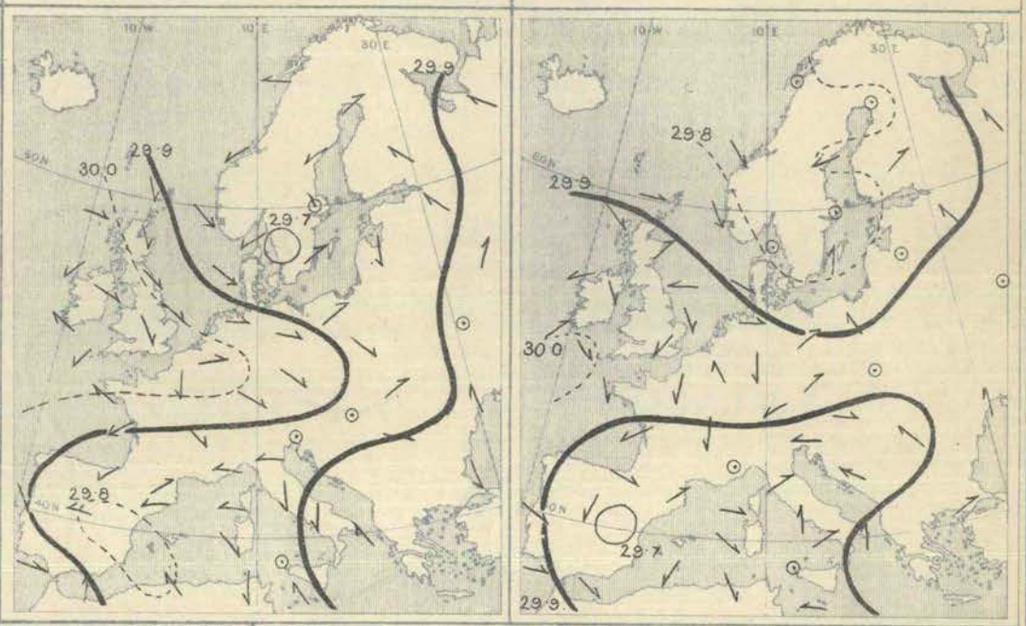


Weather fair over the United Kingdom generally, but showery on our north-eastern coasts. Fine and bright over the northern and central parts of France and the south of Italy, but cloudy in most other parts of the Continent, with rain in the south of France and several parts of Denmark and Germany, and with a thunderstorm at Trieste. Considerable amount of rain falling during day at Nice and Trieste, and smaller quantities at one or two of our own northern and eastern stations, as well as in Spain and Italy.

Temperature risen a little over north-western Europe, as well as in the western and southern parts of Russia, but fallen in most other localities. Morning readings highest, 73° at Algiers, 70° at Brindisi and Tunis, and 69° at Oran; above 65° at most of the Mediterranean stations. Lowest, 39° at Archangel, 40° at Haparanda, 44° at Hernösand, and 46° at Bodö, Christiansund, and Münster. Rising during day to between 60° and 65° in most parts of the United Kingdom, and to between 65° and 70° over the greater part of France. Exceeding 70° in Spain and Italy, and reaching 82° at Palermo.

Barometer and Wind.

8 a.m. 6 p.m.



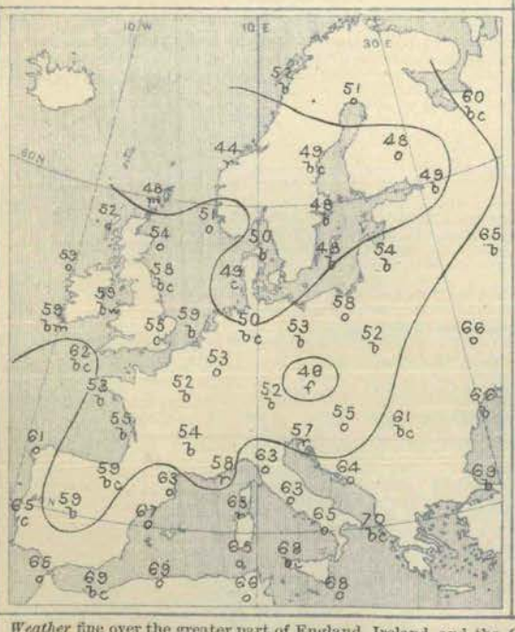
Wind light or moderate from the North-Westward over the northern and eastern parts of the United Kingdom, and fresh or strong from the same quarter on the eastern shores of the North Sea; Westerly in Germany; South-Westerly over the Baltic, South-Easterly in Finland, and Easterly or North-Easterly over the northern parts of Scandinavia. Light from North-East on our extreme south-western and southern coasts, and moderate from the same quarter in the west of France and the north of Spain; Westerly in the south of Spain. Variable in Austria; Northerly in Italy, South-Easterly or Southerly in Algeria. Light South-Westerly breezes setting in later in many parts of Ireland and Scotland.

Barometer highest, 30·0 ins. and upwards in an anticyclone covering all but the extreme northern and north-eastern parts of our Islands, with Belgium, western Germany, and the northern parts of France. Lowest, 29·8 ins. and less in shallow depressions lying respectively over Lapland, the southern parts of Scandinavia, and off the south of France. Slight fall of barometer taking place over western Europe during day, but general distribution of pressure remaining unchanged. Depressions over Lapland and the south of Sweden gradually dispersing.

Friday, 2nd June.

Temperature and Weather.

8 a.m.

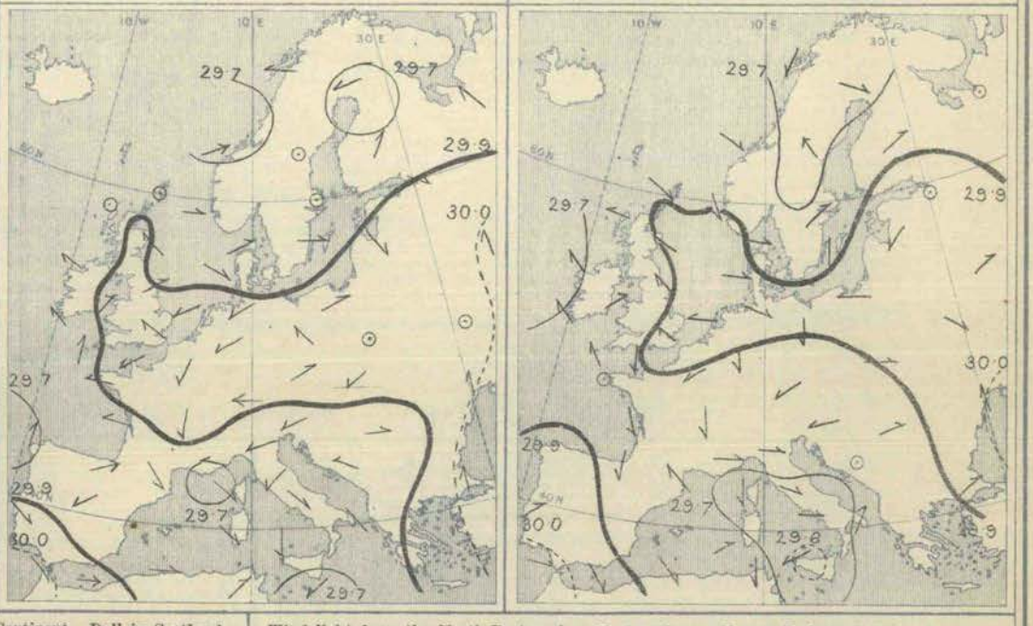


Weather fine over the greater part of England, Ireland, and the Continent. Dull in Scotland, the north of Ireland, and the west of Norway, with rain at Christiansund: rainy in the south of France and also at Trieste; dull over the greater part of Spain and northern Italy. Rain falling during day in the west and south of Ireland, but weather remaining fair and dry in nearly all other parts of western Europe. Considerable amounts of rain falling at some of the Italian stations.

Temperature risen a little in all but the southern countries. Morning readings highest, 71° at Brindisi, and 69° at Nemours, Algiers, and Constantinople, above 60° over southern and eastern Europe generally, as well as in the Scilly Islands. Lowest, (1) 36° at Hangö, 44° at Christiansund, and 45° at Helsingfors; (2) 48° at Sumburgh Head, 46° at Prague, and 49° at Swinemünde. Rising during day to 65° or more over the inland parts of England and Ireland, and reaching 70° at Loughborough. Exceeding 70° over southern Europe and the Mediterranean, and reaching 82° at Brindisi and Palermo.

Barometer and Wind.

8 a.m. 6 p.m.



Wind light from the North-Eastward or Eastward over France, Italy, and the south-east of England: Easterly or South-Easterly on many parts of our western and northern coasts, but variable in the north of Scotland, South-Westerly or Westerly over Scandinavia, Denmark, and the Baltic. Southerly at most of the Russian stations; variable in Germany and Austria; Westerly in Spain and Algeria. No important change occurring during day.

Barometer highest, 30·0 ins. and upwards over the central and southern parts of Russia, as well as over Morocco and the extreme south of Spain; 29·9 ins. and upwards over nearly the whole of Great Britain and central Europe. Lowest, 29·7 ins. and less in five shallow depressions lying:—(1) over Lapland; (2) off the west of Norway; (3) off the north-west of Spain; (4) off the south of France, and (5) near Malta. New disturbance appearing later off the west of Ireland and moving steadily northwards. Depression near Malta advancing northwards over Sicily.

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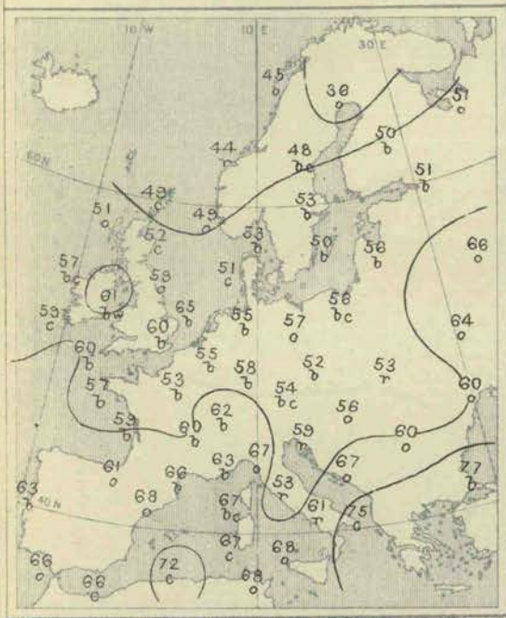
Saturday, 3rd June.

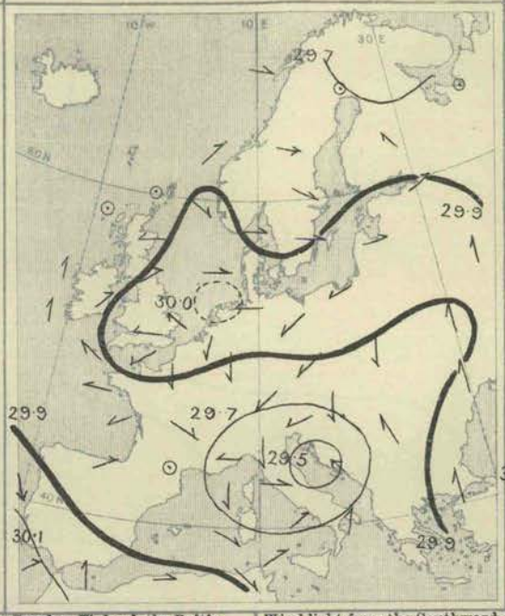
Temperature and Weather.

8 a.m.

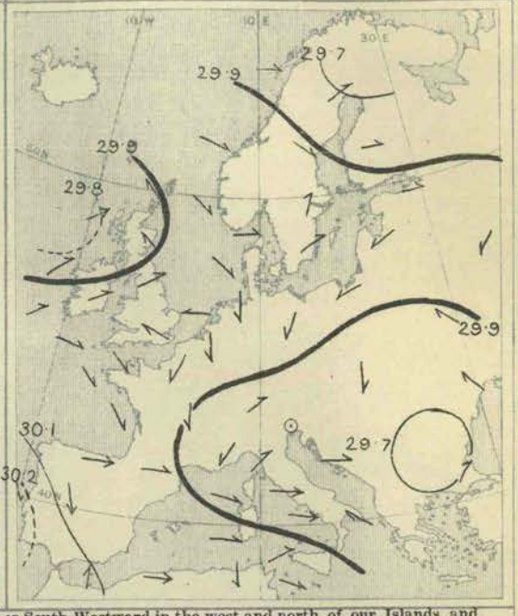


Barometer and Wind.

8 a.m.



6 p.m.



Weather fine over Great Britain, France, and Spain, as well as over Sweden, Finland, the Baltic, and many parts of Germany. Dull in Ireland, and also in the west of Norway, and most parts of Russia, Austria, and Italy; rain falling at many of the Italian stations. Showers falling during day in various parts of the United Kingdom; thunderstorms occurring at Nice and Servance.

Temperature changed very irregularly. Morning readings highest, 77° at Constantinople, 75° at Brindisi, 72° at Algiers, 71° at Sfax, and 68° at Barcelona, Palermo, and Tunis, above 65° at most of the Mediterranean stations, and also over the southern parts of Russia; above 60° on some parts of our own north-western coasts. Lowest, 36° at Haparanda, 43° at Helsingfors, 44° at Christiansund, 45° at Hangö, and 48° at Hernösand and Faerder. Rising during day to 65° and upwards in many parts of the United Kingdom, and reaching 73° at Loughborough and Cambridge. Exceeding 75° in the southern parts of France and Italy, and reaching 84° at Brindisi.

Wind light from the Southward or South-Westward in the west and north of our Islands, and from the Westward over Scandinavia, Denmark, and the Baltic. Light from the Eastward or North-Eastward over the Netherlands, Germany, France, and the south and south-east of England, but South-Westerly or Westerly over Algeria and the south of Italy. Subsequently shifting to the South-Westward in the west and south of England, no decided change occurring elsewhere.

Barometer highest, 30·1 ins. and upwards in an anticyclone lying off the south of Spain; 30·0 ins. and upwards over the Black Sea and the south of Russia: 29·9 ins. and upwards in a large area extending from Russia across north Germany and the Baltic to the Netherlands, England, and the North Sea. Lowest, 29·5 ins. and less in a well-marked depression over the Adriatic; 29·7 ins. and less over Lapland; 29·8 ins. and less in the extreme north-west of our Islands. Adriatic depression filling up later; no other change of importance occurring over Europe.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are show by arrows, which are drawn flying *with the wind*, the force is indicated thus: ⇛⟶ = a heavy gale; ➔⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breese: and ⊙ = a calm. In the left-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds: o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Germany, Sweden, and Norway, and 7 a.m. in France, Algeria, Italy, Austria, and Russia; that for 6 p.m. is prepared from observations made at 6 p.m. in the British Islands and France, 7 p.m. in Algeria, 8 p.m. in Sweden and Norway, Germany, and Austria, and 9 p.m. in Russia, Belgium, and Italy. The time indicated in each case is the standard time for each country.

GENERAL NOTES.

During the greater part of the week the eastern portion of a large anticyclone extended over the United Kingdom from the Atlantic, while low pressure systems were developed over Scandinavia and the Baltic. The depression which lay over the south of Sweden on the 29th and 30th May increased considerably in depth, and occasioned strong gales from the Northward in the south of Norway, and fresh gales from the North-Eastward over the Gulf of Bothnia, with considerable falls of rain over northern Europe generally. At times, when shallow secondary depressions passed down the North Sea, showers were experienced over the northern and eastern parts of Great Britain, but in the south of our Islands the weather was mostly fair.

After the 30th, the anticyclone gradually broke up, and during the closing days of the week a shallow depression moved northwards along our extreme western and north-western coasts. The wind, therefore, shifted to the South-Westward or Southward, and showery weather set in over the greater part of the Kingdom.

Over Italy and the extreme south of France large quantities of rain have occurred during the week, with thunderstorms in many places.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 128.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	32·1	?	27	?	EASTBOURNE	54·4	?	49	?
OSWALDKIRK (Yorkshire)	27·8	?	24	?	TENBY	61·0*	?	54*	?
WORKSOP	27·7	−11·2	24	− 11	NEWQUAY	67·0	?	60	?
THURCASTON (Leicestershire)	34·5	− 6·2	30	− 4	TORQUAY	45·5*	?	41*	?
MARGATE	55·1	?	49	?	ARLEY COTTAGE (County Cavan)	28·4	?	25	?
WESTBOURNE (Sussex)	33·6*	?	30*	?	GUERNSEY	73·1*	?	66*	?
BRIGHTON	47·7	?	43	?					

* The values at Westbourne, Tenby, Torquay and Guernsey are obtained by Jordan's Photographic Recorder.

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WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W. R. H. SCOTT, F.R.S., SECRETARY.

By whom Subscriptions, payable in advance, can be received.

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VOL. X. No. 23.] *Third Series.* WEEK ENDING SATURDAY, 10TH JUNE, 1893. [*Price 6d.* [*Annual Subscription, post paid, £1 10s. 0d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871-90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the twenty-five years 1866-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90 only BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the ten years 1881-90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

	DISTRICTS. (See p. 128.)	Temperature of the Air.													
		Observed during the Week.					Above or below the Mean for the Week.	Accumulated.							
				Averages of				For the Week.				From January 1st, 1893.			
		Highest.	Lowest.	Daily Maxima.	Daily Minima.	Daily Mean.		Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	71	36	62·5	47·7	54·6	3 above.	88	+31	0	− 2	718	+277	485	− 57
	1. SCOTLAND, EAST	74	37	63·5	47·9	55·1	3 above.	92	+17	0	− 1	822*	+221	548	− 21
	2. ENGLAND, N.E.	72	41	62·2	48·6	54·9	1 above.	90	+12	0	− 1	841	+246	436	− 62
	3. ENGLAND, EAST	76	41	66·2	48·4	56·7	1 above.	103	+11	0	− 1	1046	+289	524	− 37
	4. MIDLAND COUNTIES	79	40	68·9	48·1	57·8	3 above.	111	+19	0	− 1	1167	+387	505	− 47
	5. ENGLAND, SOUTH	75	41	67·2	50·5	58·2	2 above.	113	+15	0	0	1169	+323	373	− 43
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	74	41	66·0	49·7	57·3	4 above.	107	+29	0	0	929	+303	354	− 63
	7. ENGLAND, N.W.	76	42	67·0	51·2	58·6	4 above.	116	+31	0	0	1044	+383	323	− 91
	8. ENGLAND, S.W.	78	42	68·2	50·6	58·7	3 above.	117	+28	0	0	1218	+413	246	− 70
	9. IRELAND, NORTH	78	43	65·8	51·2	58·0	4 above.	112	+31	0	0	1050	+329	258	−104
	10. IRELAND, SOUTH	76	42	68·5	51·5	59·4	4 above.	122	+34	0	0	1235	+369	178	−100
	—CHANNEL ISLANDS	72	53	66·7	55·5	60·7	5 above.	131	+36	0	0	1391	+476	70	− 52

	DISTRICTS. (See p. 128.)	Rainfall.							Bright Sunshine.							
		For the Week.			From Jan. 1st, 1893.				For the Week.				From January 1st, 1893.			
		Number of Rainy Days.	Total Fall.	More or less than the mean for the Week.	No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.	Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	3	3	4 less.	98	− 9	17·4	− 2·7	40	+ 11	33	+ 9	493	− 56	25	− 3
	1. SCOTLAND, EAST	3	4	0 (average)	79	− 6	8·8	− 3·5	35	− 10	29	− 9	625	+ 6	32	0
	2. ENGLAND, N.E.	3	3	2 less.	65	−15	7·0	− 2·9	48	+ 11	41	+ 9	718	+166	37	+ 9
	3. ENGLAND, EAST	2	4	1 less.	64	−14	6·6	− 3·1	54	+ 4	47	+ 5	856	+191	44	+ 10
	4. MIDLAND COUNTIES	2	2	3 less.	64	−12	7·0	− 4·1	46	+ 3	40	+ 4	803	+221	41	+ 11
	5. ENGLAND, SOUTH	2	2	3 less.	60	−16	7·0	− 4·0	55	+ 7	48	+ 6	875	+253	45	+ 13
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	2	4	3 less.	81	−10	14·2	− 6·3	45	0	38	0	690	+ 91	35	+ 4
	7. ENGLAND, N.W.	2	2	3 less.	68	−15	9·0	− 3·7	53	+ 9	46	+ 8	701	+110	36	+ 6
	8. ENGLAND, S.W.	1	1	4 less.	63	−23	10·7	− 5·3	75	+ 23	66	+21	933	+243	48	+ 12
	9. IRELAND, NORTH	3	6	0 (average)	83	−13	11·3	− 2·9	42	+ 1	36	+ 1	569	− 17	29	− 1
	10. IRELAND, SOUTH	2	4	2 less.	72	−19	12·1	− 4·3	46	+ 1	40	+ 1	682	+ 16	35	+ 1
	—CHANNEL ISLANDS	0	—	4 less.	68	−25	8·8	− 4·4	83	+ 33	75	+30	1069	+264	55	+ 13

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather was unsettled and showery during the earlier part of the period, but subsequently became fine and dry again in all districts. Thunder and lightning occurred in many localities on the 4th, and again at a few western and northern stations later in the week. At Braemar heavy, but exceedingly local, rain occurred during a thunderstorm on Thursday, and similar phenomena were experienced at Parsonstown during the evening of Friday, when a smaller quantity of rain fell at Edgeworthstown and Brookeborough also.

Temperature was above the mean, the excess ranging from 1° in England N.E. and E., and 2° in England S., to 4° in England N.W., Scotland W., and over Ireland, and 5° in the Channel Islands. The highest of the maxima were recorded during the middle part of the week, when they ranged from 79° in the Midland Counties, and 78° in England S.W. and Ireland N., to 71° in Scotland N. The lowest of the minima occurred either at the beginning or the end of the period, and ranged from 36° in Scotland N., and 37° in Scotland E., to 43° in Ireland N., and to 53° in the Channel Islands.

Rainfall just equalled the mean in Scotland E. and Ireland N., but was less elsewhere. Over central, southern, and south-western England the fall was very slight, while in the Channel Islands there was none.

Bright Sunshine exceeded the normal amount in nearly all districts. The percentage of the possible duration ranged from 29 to 38 in Scotland, from 36 to 40 in Ireland, and from 40 to 66 over England. In the Channel Islands the percentage was as high as 75.

Barometer and Wind.—During the early part of the week pressure was highest in the south and lowest in the north and north-west, where a shallow depression was shown. The wind was consequently South-Westerly to Westerly in direction, and light or moderate in force. By the 7th, however, the depression had disappeared, and the distribution of pressure for the rest of the week was anticyclonic, and the wind generally Easterly or North-Easterly.

* This value has been altered slightly owing to the receipt of additional formation for a preceding week.

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II.—DATA from which the SUMMARY on page 133 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°				Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	59	43	55·7	46·4	50·7	+ 2·2	61	0	0	0·01‡	−0·45	*	*	*	*
	Stornoway	64	40	61·0	46·6	53·3	+ 2·8	79	0	3	0·38	−0·27	52·5	+10·7	43	+ 9
	Wick	64	40	60·0	45·7	52·4	+ 1·7	73	0	2	0·19	−0·21	*	*	*	*
	Lairg Ⓢ	60	36	64·9	45·1	54·3	+ 2·8	86	0	2	0·19	−0·35	*	*	*	*
	Glencarron Ⓢ	69	42	65·7	49·0	56·8	+ 6·1	104	0	5	0·46	−0·72	*	*	*	*
	Fort Augustus Ⓢ	71	43	64·3	49·6	56·4	+ 3·9	101	0	3	0·10	−0·38	35·3	?	29	?
	Fort William Ⓢ	71	48	65·6	51·5	58·1	+ 4·6	113	0	4	0·55	−0·35	32·4	?	27	?
1. SCOTLAND, E.	Nairn	68	40	63·9	47·7	55·2	+ 2·0	92	0	2	0·26	−0·14	*	*	*	*
	Aberdeen	65	45	58·7	47·4	52·7	+ 0·2	75	0	3	0·61	+0·21	35·7	−10·7	29	− 9
	Braemar Ⓢ	68	37	64·1	46·4	54·6	+ 4·1	88	0	3	0·98	+0·46	36·2†	?†	30†	?†
	Ochtertyre Ⓢ	74	43	68·0	48·1	57·4	+ 4·4	108	0	2	0·14	−0·45	*	*	*	*
	Leith Ⓢ	69	48	64·1	49·9	56·5	+ 2·5	102	0	2	0·20	−0·15	*	*	*	*
	Marchmont Ⓢ	65	45	62·1	47·6	54·4	+ 2·1	87	0	3	0·38	−0·17	43·5	?	36	?
2. ENGLAND, N.E.	Alnwick Castle	64	42	59·9	48·3	53·7	+ 1·8	82	0	2	0·13	−0·27	*	*	*	*
	Durham	71	41	64·8	47·6	55·6	+ 2·1	95	0	3	0·10	−0·34	54·2	+14·7	46	+13
	Shields	65	45	60·9	47·9	54·0	+ 1·3	84	0	2	0·16	−0·22	*	*	*	*
	Scarborough Ⓜ	65	46	61·5	50·1	55·4	+ 1·7	94	0	3	0·43	−0·04	*	*	*	*
	York	72	44	67·6	48·3	57·3	+ 2·3	107	0	2	0·15	−0·34	49·4	+ 9·2	42	+ 6
	Spurn Head	66	47	58·4	49·4	53·6	− 0·6	81	0	3	0·57	+0·20	*	*	*	*
3. ENGLAND, E.	Hillington Ⓜ	75	46	67·6	48·9	57·7	+ 2·3	110	0	1	0·66	+0·18	53·2	+ 6·5	46	+ 6
	Yarmouth	63	48	59·4	49·7	54·2	− 1·1	85	0	2	0·25	−0·15	*	*	*	*
	Geldeston	70	41	62·5	46·9	54·2	− 0·7	85	0	2	0·48	+0·10	48·1	− 3·3	42	− 2
	Cambridge	76	44	72·3	48·1	59·4	+ 3·2	122	0	2	0·20	−0·30	56·6	+10·7	50	+10
	Rothamsted	72	46	69·4	48·3	58·1	+ 3·2	113	0	1	0·24	−0·24	58·1	?	51	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	75	40	68·3	46·6	56·7	+ 1·3	103	0	1	0·30	−0·20	*	*	*	*
	Loughborough	79	42	69·4	47·9	57·9	+ 1·5	111	0	1	0·13	−0·37	*	*	*	*
	Stamford (Ketton Hall)	75	43	69·7	48·6	58·1	+ 1·7	113	0	2	0·33	−0·12	*	*	*	*
	Cheadle Ⓜ	71	45	66·2	47·9	56·5	+ 3·4	102	0	1	0·08	−0·56	*	*	*	*
	Churchstoke Ⓜ	73	43	69·2	47·6	57·7	+ 4·2	110	0	2	0·05	−0·44	48·6	+ 6·3	42	+ 5
	Hereford Ⓜ	74	45	69·8	49·5	59·0	+ 2·9	119	0	2	0·23	−0·27	*	*	*	*
	Cirencester	72	42	68·3	47·6	57·2	+ 2·8	106	0	2	0·12	−0·42	47·2	+ 2·1	41	+ 2
	Oxford	74	45	70·3	49·7	59·3	+ 3·3	121	0	2	0·35	−0·15	52·3	+ 7·4	46	+ 7
5. ENGLAND, S.	London	74	47	71·9	50·1	60·2	+ 2·9	127	0	1	0·10	−0·39	50·4†	+ 7·7†	44†	+ 6†
	North Foreland	69	49	60·4	50·9	55·3	+ 0·3	93	0	0	—	?	*	*	*	*
	Strathfield Turgiss Ⓜ	73	41	71·6	48·6	59·4	+ 3·3	122	0	3	0·19	−0·23	*	*	*	*
	Dungeness	65	46	63·1	50·7	56·5	+ 0·5	102	0	2	0·11	−0·28	*	*	*	*
	Hastings (St. Leonards)	69	48	65·3	50·2	57·2	+ 0·6	106	0	2	0·14	−0·36	67·9	+14·4	60	+12
	Southampton	75	48	70·3	51·6	60·3	+ 3·2	128	0	1	0·26	−0·22	47·0	− 1·8	42	− 1
	Hurst Castle	71	43	66·3	51·3	58·3	+ 1·9	114	0	2	0·20	−0·20	*	*	*	*
	Stowell Ⓜ	73	47	68·4	50·2	58·7	+ 3·3	117	0	3	0·25	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	69	45	66·6	48·9	57·2	+ 4·0	106	0	2	0·27	−0·80	*	*	*	*
	Glasgow	70	48	65·7	51·2	58·0	+ 4·5	112	0	2	0·26	−0·32	37·7	+ 0·7	31	0
	Ardrossan	68	48	64·4	50·6	57·0	+ 3·1	105	0	2	0·33	−0·25	*	*	*	*
	Glenlee Ⓢ	74	41	68·4	48·0	57·5	+ 4·6	109	0	5	0·87	+0·17	*	*	*	*
	Douglas (Isle of Man)	71	43	65·0	49·9	56·9	+ 3·4	104	0	1	0·05	−0·45	52·1	+ 0·9	45	+ 1
7. ENGLAND, N.W.	Newton Reigny	73	42	68·6	46·0	56·5	+ 4·1	102	0	2	0·34	−0·15	53·9	+ 7·3	46	+ 4
	Stonyhurst	71	45	66·4	49·7	57·6	+ 3·2	109	0	2	0·14	−0·56	53·0	+ 8·3	45	+ 7
	Blackpool Ⓜ	72	50	67·1	52·9	59·5	+ 4·8	123	0	0	—	−0·50	57·1	+11·8	49	+10
	Manchester	71	46	67·3	49·9	58·0	+ 3·6	112	0	3	0·33	−0·33	46·3†	?	40†	?
	Liverpool Obsy. (Bidston)	76	51	68·6	53·6	60·6	+ 4·9	130	0	1	0·04	−0·36	*	*	*	*
	Llandudno Ⓜ	73	50	66·1	53·6	59·4	+ 3·7	122	0	1	0·11	−0·29	56·7	+13·7	49	+12
	Holyhead	69	50	65·1	52·7	58·5	+ 3·8	116	0	3	0·22	−0·22	*	*	*	*
8. ENGLAND, S.W.	Llandovery	78	42	72·9	47·1	59·1	+ 3·6	120	0	3	0·29	−0·38	*	*	*	*
	Pembroke	67	53	63·0	53·9	58·1	+ 3·7	113	0	3	0·08	−0·37	62·5	+ 8·5	55	+ 8
	Bristol (Montpelier)	76	48	71·5	52·4	61·3	+ 5·2	135	0	2	0·37	?	*	*	*	*
	Arlington (N. Devon)	72	43	68·4	48·1	57·5	+ 3·9	109	0	0	—	−0·73	*	*	*	*
	Cullompton Ⓜ	74	42	70·5	47·1	58·0	+ 2·8	112	0	1	0·13	−0·37	68·9	+22·6	61	+20
	Falmouth	71	49	67·2	52·9	59·2	+ 3·7	120	0	0	—	−0·59	78·7	+26·6	70	+23
	Plymouth	70	49	68·2	50·7	58·8	+ 1·1	118	0	0	—	−0·44	80·7	+32·9	72	+30
	Prawle Point	69	50	63·7	52·3	57·6	+ 3·2	109	0	0	—	−0·34	*	*	*	*
9. IRELAND, N.	Malin Head	62	50	60·1	52·6	56·1	+ 1·7	99	0	2	0·33	?	*	*	*	*
	Londonderry	78	47	69·9	49·9	59·2	+ 4·5	120	0	3	0·36	−0·21	*	*	*	*
	Edenfel (Omagh)												*	*	*	
	Belmullet	70	51	65·0	54·0	59·1	+ 4·8	120	0	3	0·64	?	*	*	*	*
	Markree Castle	74	43	69·2	49·6	58·7	+ 5·8	117	0	4	0·72	+0·12	48·7	+ 9·7	42	+ 9
	Brookeborough	72	45	66·6	48·9	57·1	+ 3·7	106	0	6	1·18	+0·53	*	*	*	*
	Armagh	75	47	67·4	50·3	58·3	+ 4·6	114	0	3	0·42	−0·06	34·4	− 6·8	29	− 7
	Donaghadee	65	52	62·6	53·3	57·6	+ 3·9	109	0	3	0·26	−0·22	*	*	*	*
	Edgeworthstown												*	*	*	*
10. IRELAND, S.	Dublin	70	50	65·7	53·0	58·9	+ 3·2	118	0	3	0·51	+0·09	44·3	− 1·4	38	− 2
	Parsonstown	76	45	69·3	50·0	59·0	+ 4·6	119	0	2	1·37	+0·83	35·7	− 6·0	31	− 5
	Kilkenny	75	48	70·1	50·3	59·5	+ 4·5	123	0	2	0·31	−0·20	*	*	*	*
	Waterford	75	46	70·3	48·6	58·7	+ 3·1	117	0	2	0·19	−0·37	*	*	*	*
	Roche's Point	67	50	64·4	53·1	58·4	+ 2·5	115	0	2	0·25	−0·46	*	*	*	*
	Valencia	72	48	66·9	52·1	59·0	+ 3·9	119	0	3	0·25	−0·47	57·5	+10·3	50	+ 8
	Killarney	76	42	70·5	50·2	59·7	+ 5·3	124	0	2	0·11	?	*	*	*	*
	Foynes	75	51	71·1	54·3	62·1	+ 7·5	141	0	2	0·38	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	70	54	66·4	55·9	60·8	+ 5·1	132	0	0	—	−0·39	*	*	*	*
	Jersey	72	53	67·0	55·1	60 6	+ 3·9	130	0	0	—	−0·42	88·5	+32·5	80	+30

Stations marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

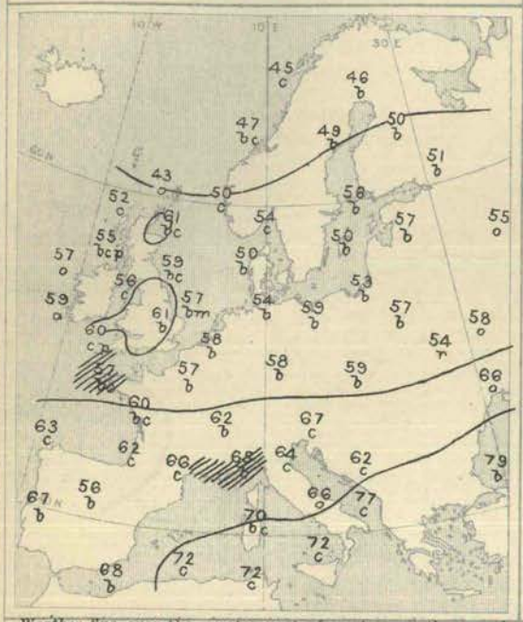
† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row) at the Kew Observatory, and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

‡ Wet Fog.

Sunday, 4th June.

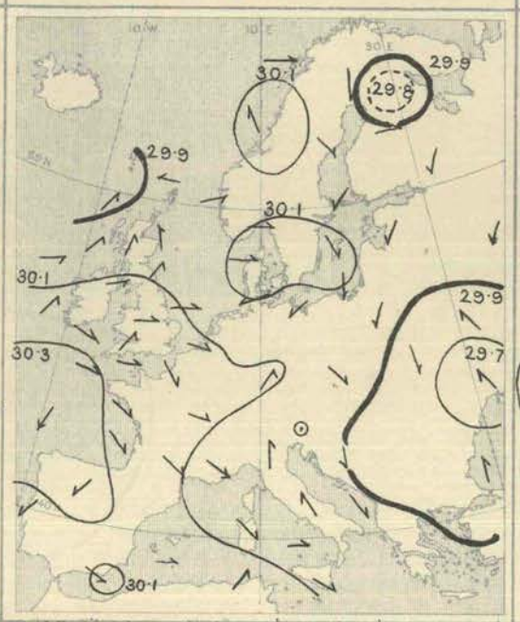
Temperature and Weather.

8 a.m.

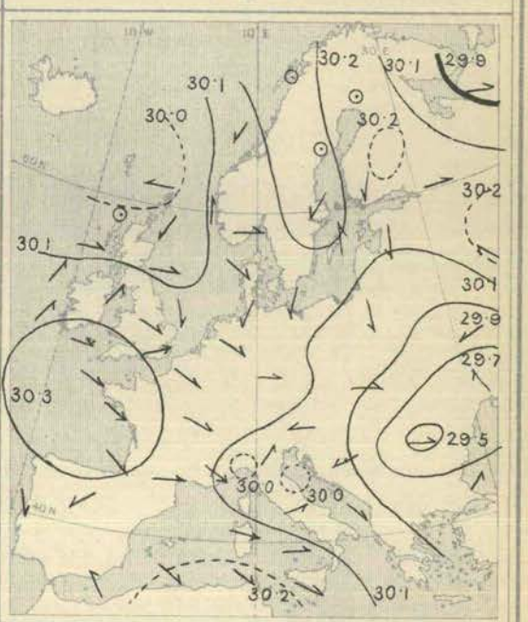


Barometer and Wind.

8 a.m.



6 p.m.



Weather fine over the greater part of western, northern, and central Europe, showery in the west and north of Ireland, cloudy or overcast in Italy and the central and southern parts of Russia, rain at Hangö and Lemberg. Thunderstorms with heavy local rains occurring during day in several of the eastern, central, and south-eastern parts of Great Britain; rain falling also at most of our western stations, as well as in Germany and south of Russia. Considerable quantities over some parts of Austria.

Temperature risen in most places. Morning readings highest, 79° at Constantinople, 77° at Brindisi, 75° at Sfax, and 72° at Palermo, Algiers, and La Calle, above 65° in most parts of southern and eastern Europe, and a little above 60° in several parts of Great Britain. Lowest, 44° at Hangö, 45° at Bodö, 46° at Haparanda and Uleaborg, and 47° at Christiansund. Rising during day to between 60° and 65° in Ireland, and to between 65° and 70° in many parts of Great Britain, reaching 73° in London, and 75° at Cambridge. Daily maxima over France and Italy varying between 75° and 80°, those over Spain rather higher.

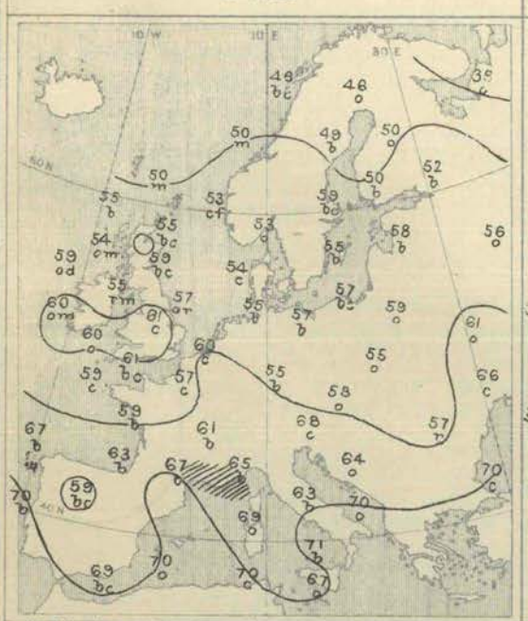
Wind light to moderate from the South-Westward or Westward in our Islands, from the North-Westward in France, and strong from the Northward and North-Eastward in the west of Spain. Variable over Scandinavia and northern Russia, Northerly in Germany and Austria; South-Easterly or Easterly in the south of Russia; variable in Italy. No important change occurring over western Europe during day, beyond becoming variable on our north-west coasts.

Barometer highest, 30·3 ins. and upwards over the Bay of Biscay and the northern parts of Spain, 30·0 ins. and upwards in an anticyclone of irregular form covering the greater part of western, northern, and central Europe, and extending southwards over the Mediterranean. Lowest, 29·7 ins. and less in a depression over the south of Russia; 29·9 ins. and less in two other depressions, one lying over Lapland, and the other off the north of Scotland. General rise of barometer taking place during day; the anticyclone over Bay of Biscay spreading north-eastwards, but a deep depression being developed over south-eastern Europe.

Monday, 5th June.

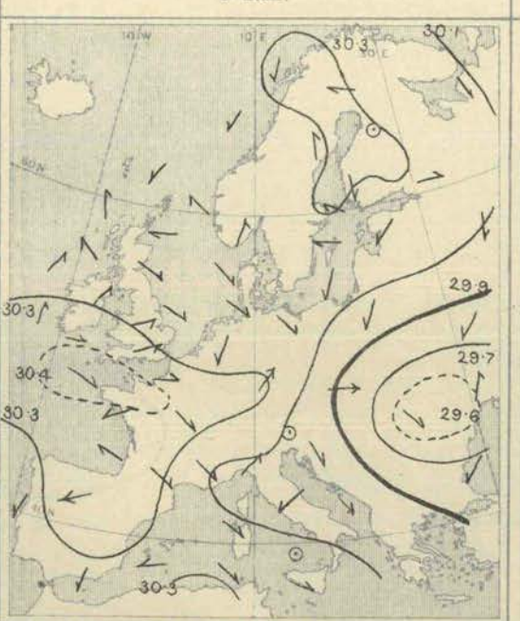
Temperature and Weather.

8 a.m.

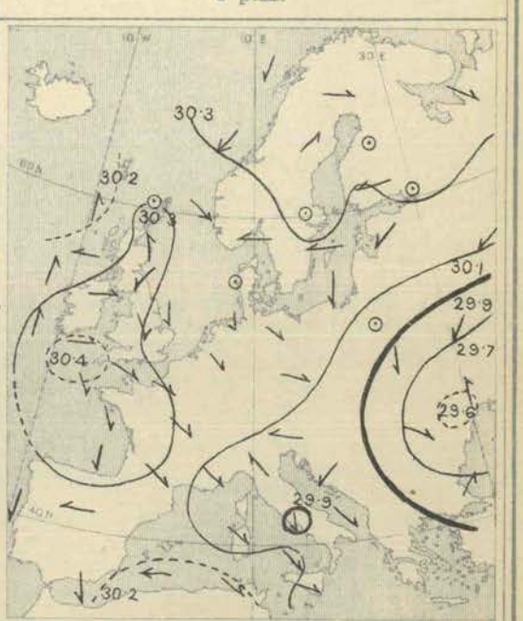


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning fine and bright over the Mediterranean, the Spanish Peninsula, France, and many parts of north-western and northern Europe, very dull over eastern and south-eastern Europe, with rain in Hungary. Considerable rain later at Belmullet, and local showers in several parts of the United Kingdom. Considerable rain also over Switzerland, south Germany, Austria-Hungary, and the south of Russia.

Temperature changing irregularly. Morning readings highest, 65° to 73° in many parts of southern Europe, and exceeding 60° in several parts of France, the British Isles, and south of Russia. Lowest, 39° at Archangel, 46° at Haparanda and Bodö, 50° at Kuopio, Hangö, Bodö, and Sumburgh Head. Rising later to a little above 70° over our south midland counties, to between 75° and 80° over the south of France, to rather higher over Italy, to between 77° and 86° over the Peninsula, and to 95° at Biskra.

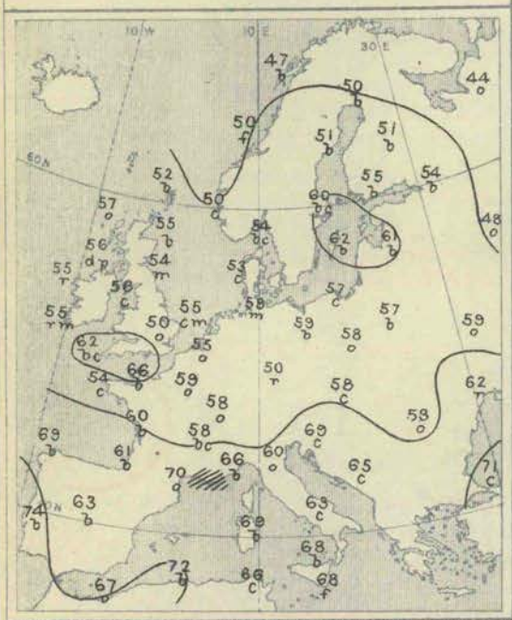
Wind very variable, but mainly anticyclonic over northern and north-western Europe; cyclonic in the south-east (but of little strength)—the direction being chiefly Northerly to Easterly over Russia; Westerly to North-Westerly over Austria-Hungary, Southerly at Nicolaieff and Odessa. Becoming Southerly in the West and North-West of our Islands later, but Northerly in the East.

Barometer highest, 30·4 ins. and more to 30·2 ins. in an anticyclone of irregular form covering the whole of western Europe, 30·3 ins. and more to 30·2 ins. in another over northern Europe, exceeding 30·3 ins. over Tunis. Lowest, 29·6 ins. and less in a depression over the south of Russia, and below 30·2 ins. off our extreme north-west coasts. Depression in south-east showing some tendency to decrease in intensity.

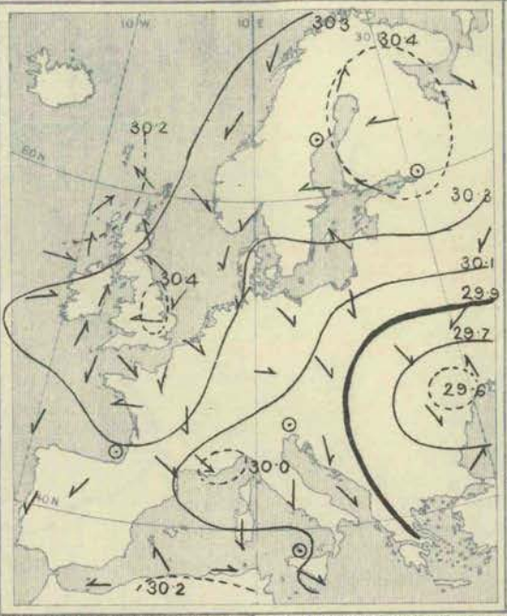
Judd & Co Lth. Lith. 63, Carter Lane

Tuesday, 6th June.

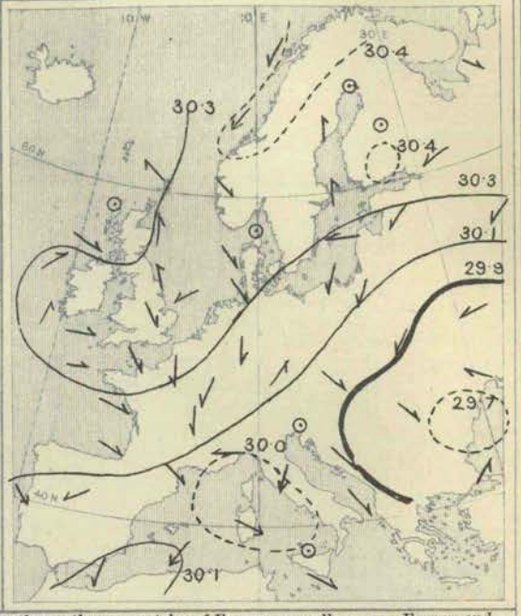
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over the Mediterranean, southern and many parts of western and northern Europe, dull and unsettled both in the south-east of Europe and the west and north-west of the British Islands—rainy (1) at Valencia and Belmullet, (2) at Nicolaieff, Lemberg, and Cracow. Rain later over all the northern and western parts of the British Isles, and local showers in the south-east, thunderstorms over Germany and at Nice; heavy rains over Austria-Hungary and the south of Russia.

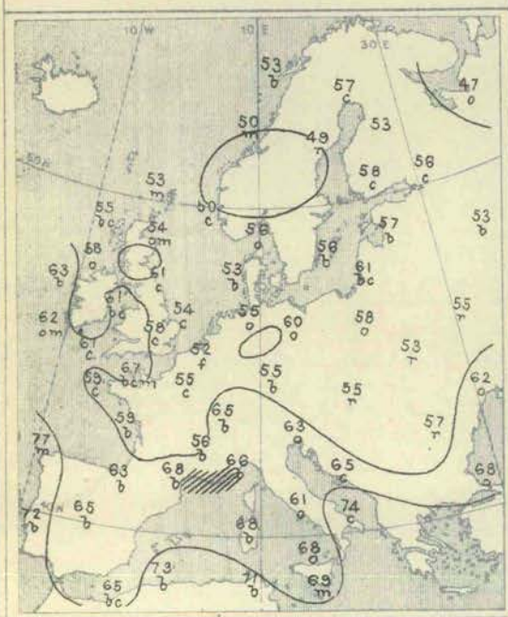
Temperature highest, 72° at Algiers and Sfax, 71° at Barcelona and Constantinople, and exceeding 60° on the coasts of southern Europe generally, as well as over the Baltic Provinces; ranging between 50° and 60° in most other places, but, lowest of all, 44° at Archangel, 47° at Bodö, 48° at Moscow. Rising during the day to 93° at Biskra, to 88° at Lisbon, 87° at Madrid, 81° at Perpignan, to between 70° and 79° over Italy, 77° at Rochefort, and to between 70° and 74° over many of the inland parts of England.

Wind light and anticyclonic over the northern countries of Europe, as well as over France and England, but South-Westerly to South-Easterly in Ireland and Scotland, and North-Easterly over central Russia, Northerly over Poland, North-Westerly over Austria-Hungary, and South-Westerly to Southerly over the Black Sea. A separate cyclonic circulation prevailing over the northern parts of Italy and the Mediterranean. Very variable over England and the west of France during day, little change elsewhere.

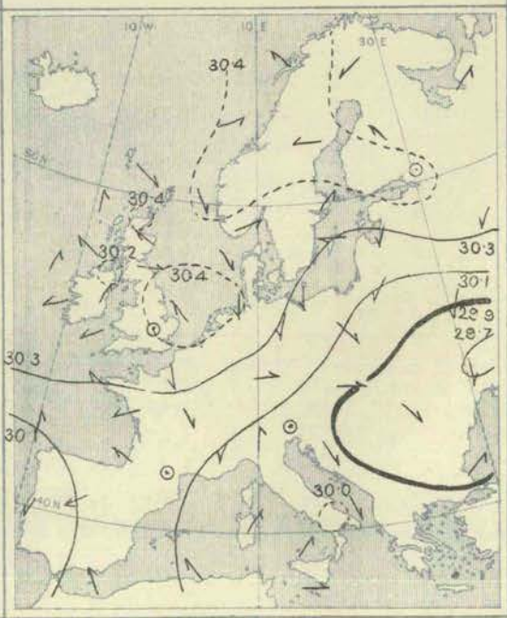
Barometer highest, 30·3 ins. and more in a large and complex anticyclone covering the whole of northern Europe, the North Sea, England, Holland, and France, and exceeding 30·4 ins. in two maxima—one over the eastern half of England, the other over Finland and the northern parts of the Gulf of Bothnia. Lowest, 29·6 ins. and less to 29·7 ins. in a depression over the Black Sea and south of Russia, and below 30·0 ins. over the northern part of the Mediterranean. Gradients steep over the southern half of Russia and the Riviera. Russian depression filling up very slowly.

Wednesday, 7th June.

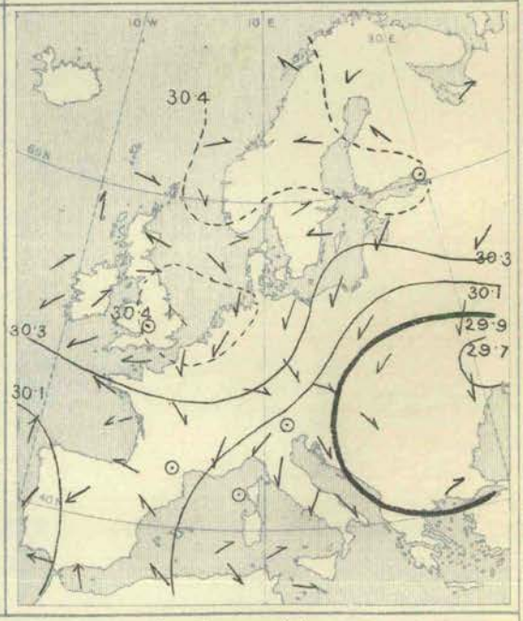
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over the Mediterranean, Spain, France, western and northern Germany, and many parts of the British Isles, the North Sea, and the Baltic; dull and very rainy over south Germany and nearly the whole of south-eastern Europe, as well as at Stockholm and Christiansund, foggy at Roche's Point, hazy in the Channel. Very slight rain at a few northern stations later, none in the south or west, and a considerable fall in the south of Russia—not much over Austria.

Temperature not changing much. Morning readings still exceeding 70° at several of the extreme southern stations, and exceeding 60° over southern Europe generally, several parts of France, as well as the south-west of England, north Wales, the extreme west of Ireland, and at Stockholm. Lowest, 47° at Archangel, 49° at Hernösand, 53° at Bodö and Sumburgh Head. Rising later to 90° at Madrid, to 80° and more at Lisbon, Perpignan, and Brest, to between 70° and 79° over Italy and England, to 70° at Stockholm, and to 60° or more over Ireland and many parts of Scotland.

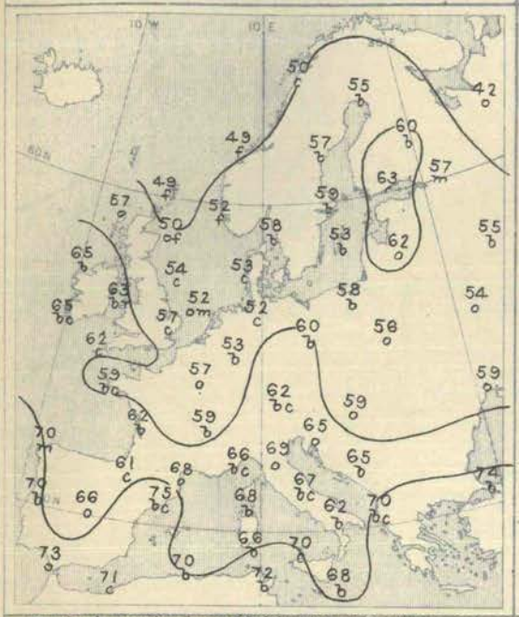
Wind light to moderate and very variable over northern Europe and the northern and western parts of the British Isles. Chiefly Northerly to Easterly over the Baltic, north Germany, and the south of England, France, and Spain; North-Easterly also (but cyclonic) over the south of Russia, North-Westerly and Northerly over south-eastern Europe, Austria, the Adriatic, and Italy. Little change later, except over Spain, where a cyclonic circulation was developed.

Barometer highest, 30·4 ins. and more to 30·3 ins. over the whole of northern and north-western Europe and the British Isles. Lowest, 29·7 ins. over the south of Russia, and below 29·9 ins. over south-eastern Europe generally. Gradients somewhat steep over central Europe. Local depression appearing over central Spain.

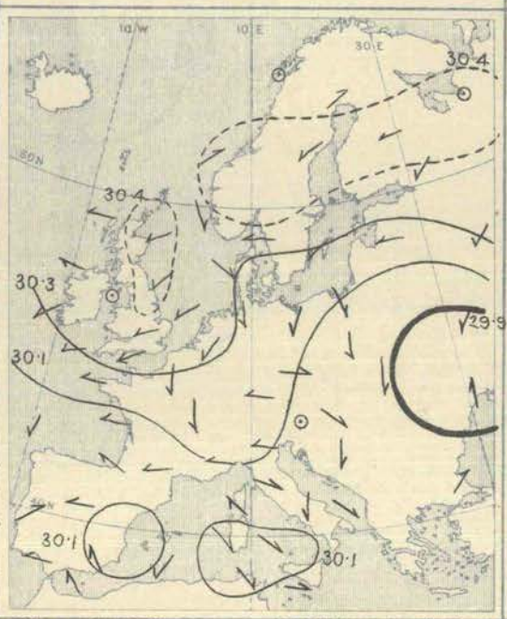
Judd & Co Lte. Lith. 63 Carter lane.

Thursday, 8th June.

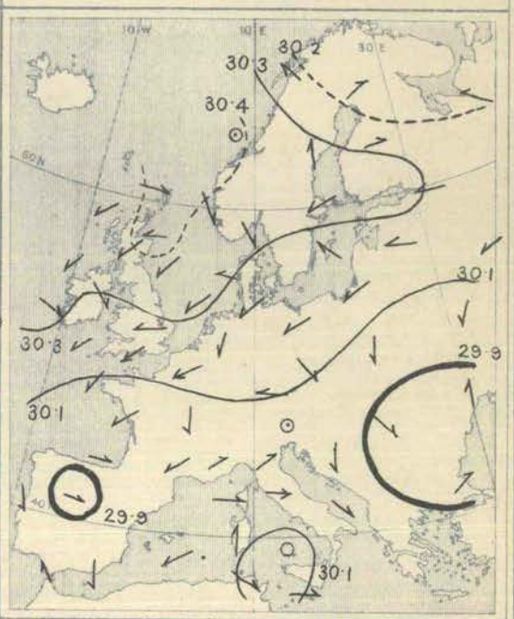
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright (1) over the extreme south-east of Europe, the Mediterranean, many parts of western Europe, including Ireland and England; (2) over the greater part of northern and central Europe with the Baltic. Cloudy or overcast over Poland, Austria-Hungary, and the south of Russia, as well as in the extreme north-west of the British Isles, foggy in the east of Scotland and the west of Norway. Very slight rain at Bodö, Nairn, and Spurn Head later, a large quantity in the south of Russia, and a heavy local fall at Hermanstadt.

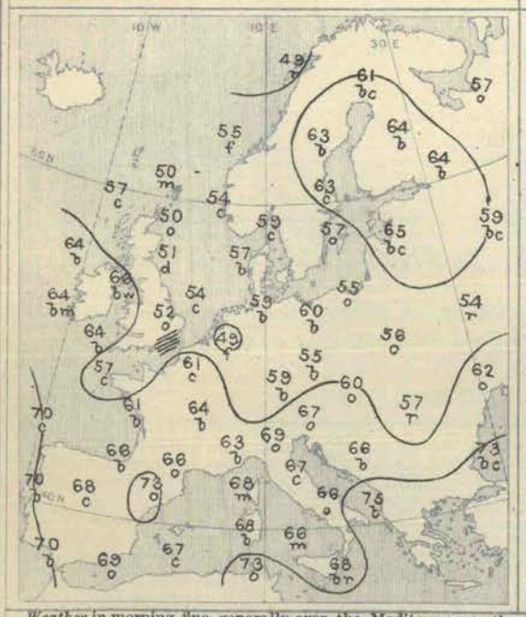
Temperature in morning highest, 70° or more at many stations over Algeria and southern Europe, and exceeding 60° locally at several stations over all but the extreme northern countries. Lowest, 42° at Archangel, 49° at Christiansund and Sumburgh Head, 50° at Aberdeen, 51° at York. Rising later to between 90° and 95° over central Algeria, to 82° at Lisbon, to between 75° and 77° in many parts of France and Germany, and to between 70° and 77° at several stations in Italy, England, Ireland, and Denmark.

Wind light and anticyclonic over the most northern and north-western countries, but mainly North-Easterly over the Baltic, north Germany, the Netherlands, France, and the east of England, Easterly over the Bay of Biscay, the English Channel, the greater part of England and Ireland; cyclonic Easterly over central Russia, Northerly over Poland, North-Westerly over Austria-Hungary, and South-Westerly to Southerly over the Black Sea, very light in force. South-Westerly to Southerly airs and light breezes reported at some extreme southern stations.

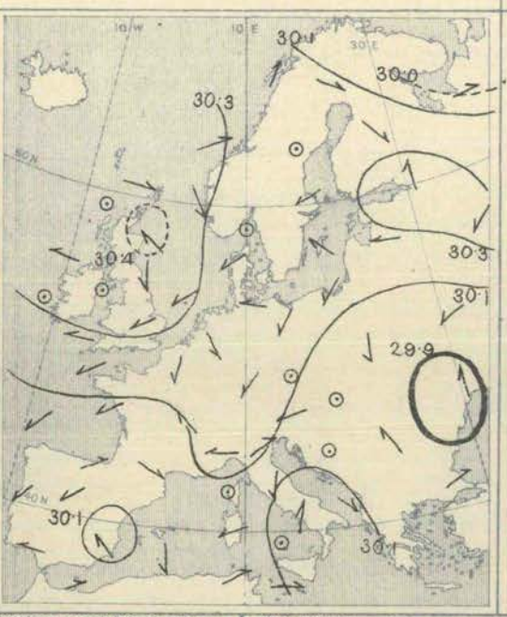
Barometer highest, 30·4 ins. and more to 30·2 ins. over all the northern and north-western countries, and exceeding 30·1 ins. over Switzerland and the south of France, as well as over Sardinia, Sicily, and Tunis. Lowest, 29·9 ins. and less over the southern parts of Russia (the depression in which region was still filling up); 30·0 ins. over Portugal and neighbouring parts of the Atlantic. Falling somewhat over Spain, France, and the British Islands later, rising over south-eastern Europe.

Friday, 9th June.

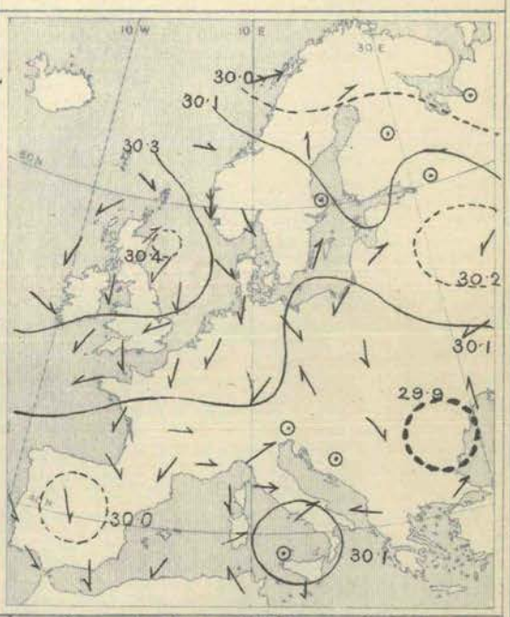
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine generally over the Mediterranean, the western countries of Europe, England, and Ireland, as well as over central Europe and the northern half of Russia, but hazy in many places: cloudy or overcast, as a whole, elsewhere, rainy over Hungary, and the south of Russia, and also at Bodö. Rainy later over the northern half of Norway, as well as over Lombardy, Austria, and the south of Russia, with thunder in places; a heavy local thunderstorm reported over central Ireland. Haze very prevalent in the English Channel.

Temperature risen fast over Sweden and northern Russia. Morning readings highest, 75° to 83° over the Mediterranean and southern Europe, and exceeding 60° even at many of the Baltic and Finnish stations, as well as in the south of the British Isles. Locally low over the Netherlands. Lowest of all, 49° at Münster and Brussels, 50° at Leith, Aberdeen, and Sumburgh Head, 51° at Shields. Rising later to 84° at Lisbon, 80° at Belfort, 75° to 80° over Italy, 79° at Brest, 70° to 75° in many inland and western parts of England, and 70° to 72° at the Swedish stations, but failing to reach 60° on the northern and eastern coasts of England.

Wind (1) Westerly over the extreme northern parts of Europe, (2) light and anticyclonic rather further to the southward, and over the northern and western parts of the British Islands, (3) Northerly to North-Easterly over Germany, the Netherlands, and south-east of England, North-Easterly to Easterly over the English Channel, France, the Bay of Biscay, and Spain, (4) light but cyclonic over southern and south-eastern Europe.

Barometer highest, 30·4 ins. and more to 30·2 ins. over the British Isles, North Sea, Baltic, and north of France, and exceeding 30·3 ins. over central Russia, the Gulf of Finland, and Baltic Provinces. Lowest, 29·9 ins. and less in a depression (nearly filled up) over the south of Russia, and below 30·1 ins. over Spain. Very shallow and local depression over central Ireland later, and barometer falling over northern Europe.

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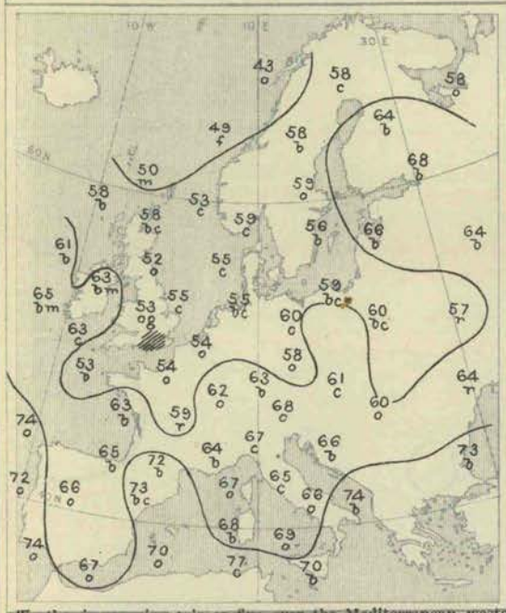
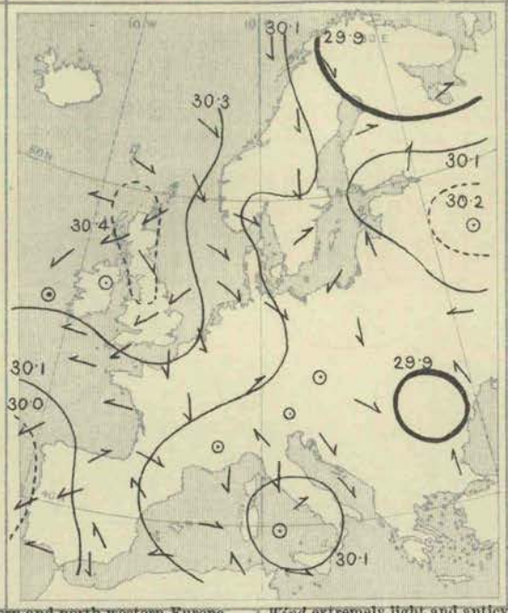
Saturday, 10th June.

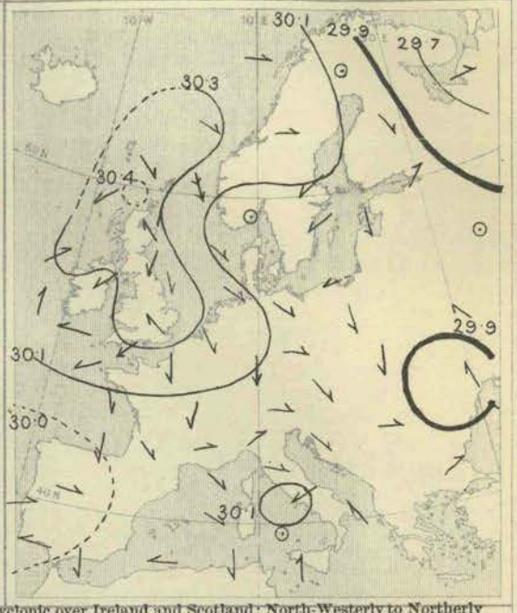
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fair or fine over the Mediterranean, western and north-western Europe, also over central Russia, the Baltic Provinces, and Poland, cloudy or overcast elsewhere, with rain at Lyons, Turin, Lemberg, Kieff, and Nicolaieff. Rain later in several parts of central, southern, and eastern Europe, and a very heavy local thunderstorm reported (by newspapers) at Dolgelly, north Wales.

Temperature in morning ranging from 64° to 77° at the Mediterranean and Spanish coast stations, 73° at Constantinople, and exceeding 60° in many parts of central Europe and Russia (68° at St. Petersburg, 64° at Kuopio) as well as in the south-west and west of our Islands. Lowest, 43° to 49° in the north-west of Norway, 50° at Sumburgh Head, 51° at Oxford, 52° at York. Rising later to 90° and more over central Algeria (some reports wanting), to between 80° and 88° in the south-west of France, 75° to 80° over Italy, and 70° to 76° over Ireland. Not touching 70° over Great Britain as a whole.

Wind extremely light and anticyclonic over Ireland and Scotland; North-Westerly to Northerly over Norway, the North Sea, and north Germany, Northerly over western Germany, North-Easterly to Easterly over England, France, the Bay of Biscay, and Spain; very variable and light over central and south-eastern Europe. Becoming Southerly in several parts of our Islands later, and Westerly over Spain.

Barometer in morning highest, 30·4 ins. and more to 30·2 ins. in an anticyclone covering the British Islands, the North Sea, and the neighbouring countries; 30·2 ins. and more to 30·1 ins. over central Russia and the Baltic Provinces. Lowest, about 29·8 ins. or less over the Kola Peninsula and White Sea, and 30·0 ins. and less both over Portugal (with adjoining parts of Atlantic), and over the south of Russia and Black Sea. Depression spreading more over Spanish Peninsula later and moving north-eastwards, barometer falling slightly over western Europe generally.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are show by arrows, which are drawn flying *with the wind*, the force is indicated thus: ⇛ = a heavy gale; → = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breese: and ⊙ = a calm. In the left-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds: o = overcast; m = misty (hazy): f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Germany, Sweden, and Norway, and 7 a.m. in France, Algeria, Italy, Austria, and Russia; that for 6 p.m. is prepared from observations made at 6 p.m. in the British Islands and France, 7 p.m. in Algeria, 8 p.m. in Sweden and Norway, Germany, and Austria, and 9 p.m. in Russia, Belgium, and Italy. The time indicated in each case is the standard time for each country.

GENERAL NOTES.

During the earlier days of this week showers of rain were prevalent over the greater part of our Islands—especially in the west, north, and north-east; but after this dry anticyclonic weather again became general until nearly its close. Thunderstorms then became prevalent in Ireland, and in a few localities the fall was heavy.

Western and central Europe have continued in the experience of fine weather, but the south-eastern countries (Austria-Hungary in particular) have had frequent and considerable falls of rain, owing to a depression which has hung persistently over those regions, but which was filling up steadily at the end of the week.

Temperature has increased steadily and decidedly over the northern countries, but has been low in the south-east.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 134.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	25·7	?	21	?	EASTBOURNE	59·7	?	53	?
OSWALDKIRK (Yorkshire)	39·7	?	34	?	TENBY	69·4*	?	61*	?
WORKSOP	36·8	− 1·2	32	− 1	NEWQUAY	85·0	?	76	?
THURCASTON (Leicestershire)	44·8	+ 5·4	39	+ 6	TORQUAY	76·4*	?	68*	?
MARGATE	43·8	?	39	?	ARLEY COTTAGE (County Cavan)	41·6	?	36	?
WESTBOURNE (Sussex)	54·6 *	?	48	?	GUERNSEY	77·2*	?	70*	?
BRIGHTON	60·1	?	53	?					

* The values at Westbourne, Tenby, Torquay and Guernsey are obtained by Jordan's Photographic Recorder.

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WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE. 63, VICTORIA STREET, LONDON, S.W. R. H. SCOTT, F.R.S., SECRETARY.

By whom Subscriptions, payable in advance, can be received.

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VOL. X. No. 24.] *Third Series.* WEEK ENDING SATURDAY, 17TH JUNE, 1893. [*Price 6d.* [*Annual Subscription, post paid, £1 10s. 0d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871-90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the twenty-five years 1866-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90 only BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the ten years 1881-90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

	DISTRICTS. (See p. 134.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 1st, 1893. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	79	42	69·4	49·2	58·6	6 above.	116	+55	0	− 1	834	+331	485	− 57
	1. SCOTLAND, EAST	83	38	70·3	48·6	58·7	5 above.	117	+36	0	0	939	+252	548	− 21
	2. ENGLAND, N.E.	83	44	65·0	49·6	56·8	2 above.	104	+19	0	0	945	+258	436	− 62
	3. ENGLAND, EAST	87	45	71·9	50·7	60·6	4 above.	130	+32	0	0	1176	+322	524	− 37
	4. MIDLAND COUNTIES	85	39	74·9	49·1	61·1	5 above.	134	+36	0	0	1301	+422	505	− 47
	5. ENGLAND, SOUTH	88	44	73·3	53·3	62·6	5 above.	144	+39	0	0	1313	+361	373	− 43
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	77	43	71·8	51·9	61·1	6 above.	134	+50	0	0	1063	+352	354	− 63
	7. ENGLAND, N.W.	82	39	71·9	51·6	61·0	5 above.	133	+42	0	0	1177	+422	323	− 91
	8. ENGLAND, S.W.	87	41	72·5	53·0	62·1	5 above.	141	+44	0	0	1359	+455	246	− 70
	9. IRELAND, NORTH	82	44	71·7	53·5	61·9	7 above.	139	+52	0	0	1189	+378	258	−104
	10. IRELAND, SOUTH	78	46	70·5	53·7	61·5	5 above.	137	+42	0	0	1372	+408	178	−100
	—CHANNEL ISLANDS	81	54	68·9	56·7	62·4	5 above.	143	+42	0	0	1534	+515	70	− 52

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 134.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the mean for the Week.	From Jan. 1st, 1893. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 1st, 1893. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	1	1	6 less.	99	−12	17·5	− 3·2	66	+ 34	54	+28	559	− 29	27	− 2
	1. SCOTLAND, EAST	0	—	5 less.	79	− 9	8·8	− 4·0	73	+ 16	60	+12	698	+ 39	34	+ 2
	2. ENGLAND, N.E.	0	—	4 less.	65	−18	7·0	− 3·3	62	+ 24	52	+21	780	+190	38	+ 10
	3. ENGLAND, EAST	0	—	5 less.	64	−17	6·6	− 3·6	70	+ 22	60	+21	926	+214	45	+ 10
	4. MIDLAND COUNTIES	1	1	5 less.	65	−14	7·1	− 4·6	58	+ 16	50	+15	861	+235	42	+ 12
	5. ENGLAND, SOUTH	1	less than ½	4 less.	61	−17	7·0	− 4·4	73	+ 26	63	+23	948	+278	46	+ 13
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	0	—	7 less.	81	−13	14·2	− 7·0	72	+ 28	60	+23	762	+118	37	+ 6
	7. ENGLAND, N.W.	1	1	4 less.	69	−17	9·1	− 4·2	79	+ 36	67	+32	780	+142	38	+ 7
	8. ENGLAND, S.W.	1	1	4 less.	64	−25	10·8	− 5·7	69	+ 19	61	+17	1002	+254	49	+ 13
	9. IRELAND, NORTH	1	1	5 less.	84	−16	11·4	− 3·4	51	+ 15	43	+14	620	− 6	30	0
	10. IRELAND, SOUTH	1	less than ½	6 less.	73	−21	12·1	− 4·9	42	− 2	36	− 1	724	+ 10	35	0
	—CHANNEL ISLANDS	1	less than ½	4 less.	69	−27	8·8	− 4·8	80	+ 23	71	+21	1149	+283	56	+ 14

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather was again fine, bright, and dry very generally. During the middle part of the period thunder and lightning occurred in almost all districts, but the amount of rainfall recorded was in most cases very slight, and on several occasions sharp storms of thunder and lightning occurred without any rain.

Temperature continued above the mean, the excess ranging from 2° in England N.E., and 4° in England E., to 6° in Scotland N. and W., and to 7° in Ireland N. The highest of the maxima occurred either on the 16th or 17th, when they ranged from 77° to 83° in Scotland, from 78° to 82° in Ireland, and from 82° to 88° in England. The lowest of the minima were registered during the earlier half of the period, when they varied from 38° in Scotland E., and 39° in the Midland Counties and England N.W., to 46° in Ireland S., and to 54° in the Channel Islands.

Rainfall was less than the mean in all districts. Over the greater part of England and Scotland there was no fall whatever.

Bright Sunshine was very prevalent, and considerably exceeded the normal in nearly all districts. The percentage of the possible duration ranged from 71 in the Channel Islands, 67 in England N.W., and from between 50 and 65 over Great Britain generally, to 43 in Ireland N., and 36 in Ireland S.

Barometer and Wind.—During the early part of the week the distribution of pressure was anticyclonic and the winds light from the Eastward. By Wednesday, however, shallow low pressure systems were spreading over our southern districts from France, and on Thursday a large depression over the Atlantic was affecting our western and north-western regions, causing the wind in these parts to shift Southwards. Towards the close of the week these depressions had passed away and anticyclonic conditions had again become prevalent.

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II.—DATA from which the SUMMARY on page 139 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°				Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	67	47	58·7	48·0	53·0	+ 3·5	77	0	1	0·02	− 0·46	*	*	*	*
	Stornoway	71	45	68·9	48·1	57·8	+ 6·1	111	0	1	0·02	− 0·66	75·5	+33·7	61	+28
	Wick	76	42	67·0	49·1	57·4	+ 5·5	108	0	0	—	− 0·40	*	*	*	*
	Lairg Ⓢ	79	42	76·0	47·6	60·8	+ 8·3	132	0	0	—	− 0·55	*	*	*	*
	Glencarron Ⓢ	76	45	72·6	50·1	60·6	+ 8·7	130	0	3	0·45	− 0·76	*	*	*	*
	Fort Augustus Ⓢ	78	42	72·9	49·6	60·4	+ 6·5	129	0	3	0·12	− 0·38	50·0	?	41	?
	Fort William Ⓢ	74	48	70·0	52·0	60·4	+ 5·9	129	0	2	0·24	− 0·70	72·4	?	59	?
1. SCOTLAND, E.	Nairn	80	38	73·1	47·7	59·5	+ 4·9	123	0	1	0·04	− 0·36	*	*	*	*
	Aberdeen	77	47	63·4	50·0	56·2	+ 2·5	99	0	0	—	− 0·40	60·6	+14·8	49	+12
	Braemar Ⓢ	78	38	71·8	43·8	56 8	+ 5·0	104	0	0	—	− 0·55	78·2†	?†	64†	?†
	Ochtertyre Ⓢ	83	42	75·3	50·0	61·8	+ 7·5	139	0	0	—	− 0·62	*	*	*	*
	Leith	80	47	68·0	51·3	59·1	+ 3·8	120	0	0	—	− 0·40	*	*	*	*
	Marchmont Ⓢ	81	42	70·3	48·6	58·7	+ 5·2	117	0	0	—	− 0·58	79·3	?	65	?
2. ENGLAND, N.E.	Alnwick Castle	75	45	64·3	51·0	57·2	+ 3·9	106	0	0	—	− 0·42	*	*	*	*
	Durham	83	46	69·8	49·7	59·1	+ 4·1	120	0	0	—	− 0·44	64·5	+26·5	54	+22
	Shields	74	48	63·3	49·4	55·9	+ 1·4	97	0	0	—	− 0·40	*	*	*	*
	Scarborough Ⓜ	73	48	60·7	49·9	54·9	− 0·2	90	0	1	0·01	− 0·46	*	*	*	*
	York	82	44	72·7	47·4	59·2	+ 2·8	120	0	0	—	− 0·51	63·0	+23·6	53	+20
	Spurn Head	67	49	59·3	50·3	54·5	− 1·1	88	0	0	—	− 0·35	*	*	*	*
3. ENGLAND, E.	Hillington Ⓜ	84	47	73·1	50·1	60·8	+ 3·9	132	0	0	—	− 0·50	67·7	+22·7	58	+19
	Yarmouth	68	51	62·6	53·3	57·6	+ 1·7	109	0	0	—	− 0·45	*	*	*	*
	Geldeston	79	45	68·0	50·5	58·6	+ 2·2	116	0	0	—	− 0·38	72·5	+23·0	63	+20
	Cambridge	87	45	79·9	49·6	63·7	+ 6·0	152	0	0	—	− 0·52	70·3	+25·3	61	+22
	Rothamsted	84	46	76·1	49·9	62·1	+ 5·6	141	0	0	—	− 0·50	68·0	?	59	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	85	39	74·6	47·6	60·2	+ 3·4	127	0	0	—	− 0·52	*	*	*	*
	Loughborough	85	40	75·6	47·7	60·7	+ 2·5	131	0	0	—	− 0·52	*	*	*	*
	Stamford (Ketton Hall)	85	45	75·3	47·6	60·6	+ 2·8	130	0	1	0·01	− 0·42	*	*	*	*
	Cheadle Ⓜ	82	45	72·0	50·5	60·5	+ 5·9	130	0	0	—	− 0·67	*	*	*	*
	Churchstoke Ⓜ	82	40	73·0	47·6	59·4	+ 4·7	122	0	2	0·10	− 0·39	61·1	+19·7	53	+17
	Hereford Ⓜ	85	42	76·0	50·1	62·1	+ 4·8	141	0	2	0·13	− 0·37	*	*	*	*
	Cirencester	83	41	76·0	50·7	62·9	+ 7·0	146	0	4	0·20	− 0·35	60·3	+16·4	52	+14
	Oxford	85	45	76·6	50·6	62·7	+ 5·3	145	0	1	0·04	− 0·48	60·7	+16·8	53	+15
5. ENGLAND, S.	London	87	50	78·0	54·3	65·3	+ 6·3	163	0	0	—	− 0·50	69·4†	+28·5†	60†	+24†
	North Foreland	65	51	63·0	54·0	58·2	+ 1·9	113	0	1	0·01	?	*	*	*	*
	Strathfield Turgiss Ⓜ	88	44	78·8	48·2	62·8	+ 5·3	146	0	1	0·04	− 0·41	*	*	*	*
	Dungeness	72	51	67·6	54·1	60·4	+ 2·9	129	0	0	—	− 0·38	*	*	*	*
	Hastings (St. Leonards)	81	49	72·5	54·9	63·1	+ 5·4	148	0	0	—	− 0·40	83·3	+32·1	73	+28
	Southampton	88	48	78·5	54·3	65·6	+ 7·2	165	0	1	0·01	− 0·45	67·4	+19·6	59	+17
	Hurst Castle	83	50	73·4	55·0	63·6	+ 6·0	151	0	0	—	− 0·45	*	*	*	*
	Stowell Ⓜ	84	44	74·4	51·3	62·1	+ 5·2	141	0	2	0·05	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	74	50	71·5	53·0	61·6	+ 7·1	137	0	0	—	− 1·12	*	*	*	*
	Glasgow	77	50	73·3	53·5	62·7	+ 8·0	145	0	0	—	− 0·62	73·1	+35·9	60	+29
	Ardrossan	75	50	71·4	52·3	61·2	+ 5·8	134	0	0	—	− 0·59	*	*	*	*
	Glenlee Ⓢ	76	44	73·4	48·1	59·9	+ 5·7	125	0	0	—	− 0·72	*	*	*	*
	Douglas (Isle of Man)	75	43	69·2	52·4	60·2	+ 5·5	127	0	1	0·03	− 0·47	69·8	+19·0	59	+16
7. ENGLAND, N.W.	Newton Reigny	80	39	72·5	46·8	58·8	+ 4·9	118	0	0	—	− 0·50	89·5	+44·3	75	+35
	Stonyhurst	79	43	71·5	49·5	59·8	+ 4·3	125	0	0	—	− 0·76	82·3	+39·1	70	+33
	Blackpool Ⓜ	80	47	73·1	51·9	61·8	+ 6·1	139	0	0	—	− 0·49	75·7	+31·5	64	+27
	Manchester	82	46	73·0	50·5	61·0	+ 5·2	133	0	0	—	− 0·69	71·5†	?	62†	?
	Liverpool Obsy. (Bidston)	80	49	72·9	52·9	62·2	+ 5·3	141	0	2	0·18	− 0·25	*	*	*	*
	Llandudno Ⓜ	74	48	70·4	54·9	62·1	+ 5·2	141	0	1	0·56	+ 0·16	75·2	+33·4	65	+29
	Holyhead	73	52	69·6	54·4	61·5	+ 5·6	137	0	2	0·11	− 0·35	*	*	*	*
8. ENGLAND, S.W.	Llandovery	87	41	78·3	49·1	62·7	+ 5·7	145	0	3	0·15	− 0·54	*	*	*	*
	Pembroke	78	52	67·7	55·3	61·1	+ 5·6	134	0	0	—	− 0·45	68·1	+13·5	59	+12
	Bristol (Montpelier)	87	47	77·7	52·7	64·3	+ 6·7	156	0	2	0·27	?	*	*	*	*
	Arlington (N. Devon)	82	46	72·7	50·9	61·0	+ 5·8	133	0	2	0·57	− 0·21	*	*	*	*
	Cullompton Ⓜ	84	42	75·4	50·0	61·8	+ 5·0	139	0	1	0·01	− 0·52	67·8	+22·5	59	+19
	Falmouth	76	55	67·3	56·5	61·5	+ 4·8	137	0	1	0·07	− 0·53	68·5	+15·9	61	+14
	Plymouth	81	51	71·0	54·7	62·3	+ 3·5	142	0	0	—	− 0·47	72·5	+25·2	64	+22
	Prawle Point	76	51	70·0	54·6	61·8	+ 6·3	139	0	1	0·08	− 0·29	*	*	*	*
9. IRELAND, N.	Malin Head	68	53	65·6	56·6	60·8	+ 5·8	132	0	0	—	?	*	*	*	*
	Londonderry	82	50	78·5	54·6	65·7	+ 9·5	166	0	2	0·43	− 0·16	*	*	*	*
	Edenfel (Omagh)	78	44	74·9	53·0	63·2	+ 8·1	148	0	1	0·01	− 0·59	*	*	*	
	Belmullet	75	53	70·0	56·9	63·0	+ 8·1	147	0	2	0·02	?	*	*	*	*
	Markree Castle	77	44	71·7	49·5	59·8	+ 5·5	125	0	1	0·38	− 0·32	49·6	+12·6	42	+11
	Brookeborough	79	45	72·8	51·2	61·3	+ 6·7	135	0	1	0·02	− 0·66	*	*	*	*
	Armagh	77	45	71·4	51·6	60·8	+ 5·5	132	0	0	—	− 0·50	59·8	+19·8	51	+17
	Donaghadee	74	52	67·7	55·3	61·1	+ 6·3	134	0	1	0·01	− 0·44	*	*	*	*
	Edgeworthstown	81	47	72·3	52·6	61·8	+ 6·6	139	0	0	—	− 0·70	*	*	*	*
10. IRELAND, S.	Dublin	73	50	68·4	56·0	61·8	+ 4·7	139	0	1	0·05	− 0·37	59·7	+16·2	51	+14
	Parsonstown	75	46	72·4	52·3	61·7	+ 6·2	138	0	0	—	− 0·55	34·3	− 6·5	30	− 5
	Kilkenny	74	46	71·4	51·4	60·7	+ 4·5	131	0	0	—	− 0·52	*	*	*	*
	Waterford	78	48	71·8	52·4	61·4	+ 4·4	136	0	0	—	− 0·56	*	*	*	*
	Roche's Point	71	52	67·4	56·1	61·4	+ 4·2	136	0	0	—	− 0·72	*	*	*	*
	Valencia	74	49	69·1	53·9	61·0	+ 4·8	133	0	1	0·01	− 0·74	31·9	− 14·4	28	− 12
	Killarney	75	47	70·7	51·1	60·2	+ 4·6	127	0	1	0·02	?	*	*	*	*
	Foynes	78	46	72·7	56·1	63·8	+ 8·1	153	0	1	0·09	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	69	54	66·1	56·9	61·2	+ 4·5	134	0	0	—	− 0·41	*	*	*	*
	Jersey	81	54	71·6	56·4	63·5	+ 5·5	151	0	1	0·01	− 0·44	78·2	+23·2	70	+21

Stations marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

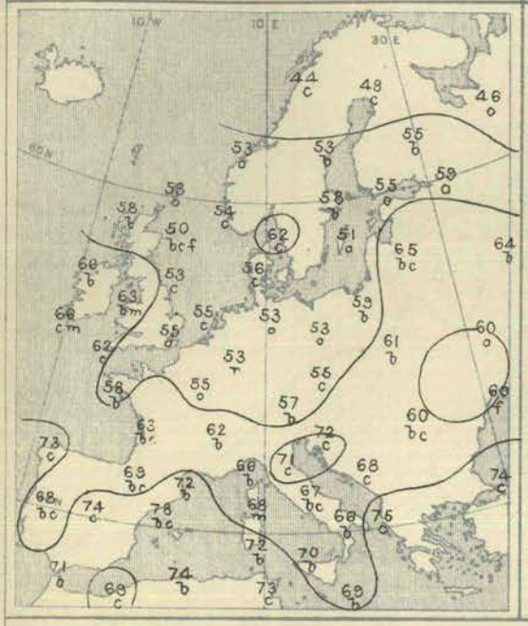
* An asterisk is inserted in all places for which the information is not usually received.

† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row) at the Kew Observatory, and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

Sunday, 11th June.

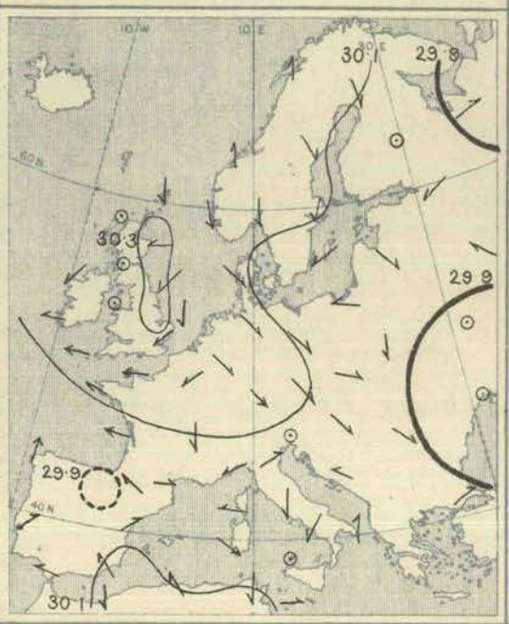
Temperature and Weather.

8 a.m.

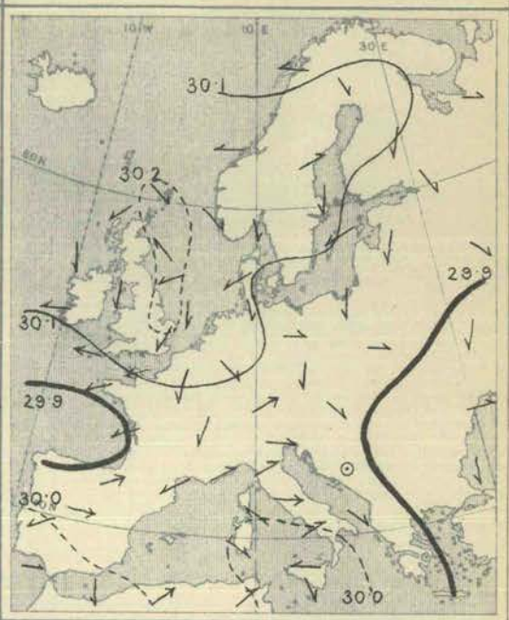


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning fine over the Mediterranean, southern and western Europe, including the British Islands; fine also over Austria, eastern Prussia, and at many stations over the northern half of Russia. Cloudy or overcast elsewhere. Rain later—in small quantity at some of the German and Austrian stations, but considerable at Fanö and Bodö. The newspapers report the occurrence of a heavy thunderstorm at Swinford (Co. Mayo).

Temperature in morning highest, 70° to 75° on the southern and western sides of the Mediterranean and at Constantinople, 60° or more over southern and eastern Europe generally; as well as in the south-west of our Islands, exceeding 50° almost everywhere else. Lowest, 44° at Bodö, 46° at Archangel, 48° at Haparanda, and 50° at Aberdeen. Rising later to 96° at Madrid, to 93° at Biarritz, to more than 80° over Spain and the southern parts of France and Italy, as a whole, and to between 70° and 75° over Ireland, but not touching 70° over Germany, the north of France, England, or Scotland.

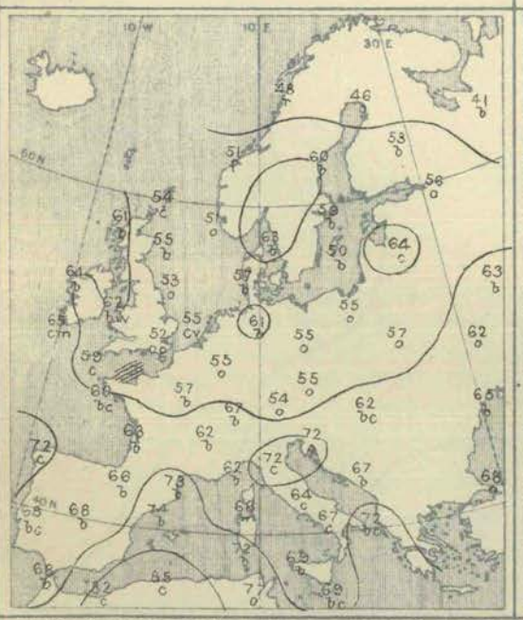
Wind light to moderate from the Northward over Scandinavia and the North Sea, and from the Eastward over Ireland, the western parts of the English Channel and the Bay of Biscay; North-Westerly over Germany and Austria; light and variable over the Mediterranean. No decided change later.

Barometer highest, 30·3 ins. and more to 30·1 ins. in an anticyclone covering the whole of the British Islands and north-western Europe; exceeding 30·1 ins. over Algeria, and exceeding 30·0 ins. over central Russia. Lowest, below 30·0 ins. off the north-west coast of Spain, and in a "hollow" stretching thence in an easterly direction across the north of Spain to the south-west of France; below 29·9 ins. both over northern and southern Russia. Falling over western and northern Europe later; rising slightly over Spain.

Monday, 12th June.

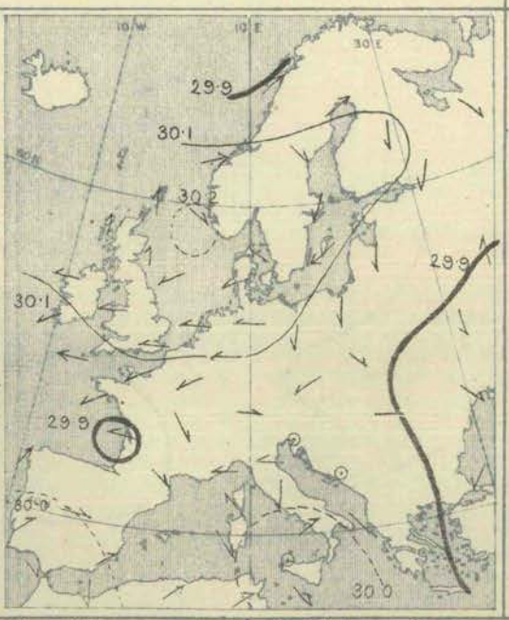
Temperature and Weather.

8 a.m.

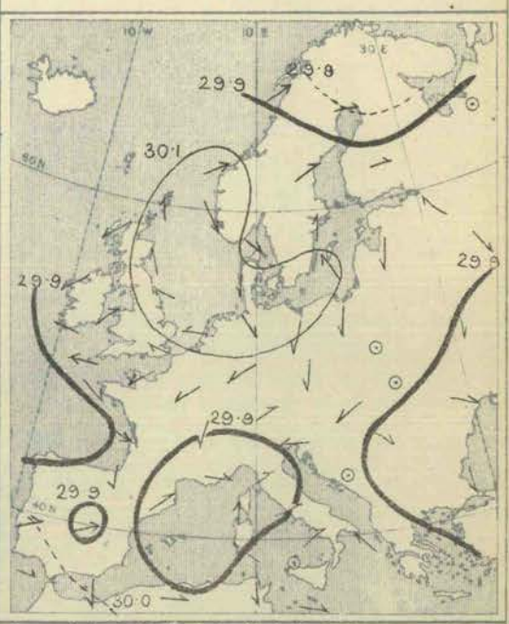


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning cloudy or overcast over England, the Netherlands, and the greater part of central Europe, as well as in the west of France, with rain at Bodö and Vienna. Fine and bright in almost all other localities. Sky clearing later over the southern parts of England, and weather remaining very dry over the entire Kingdom. Rain falling over the northern parts of Scandinavia, as well as at Berlin and some of the Russian and Austrian stations. Thunderstorms occurring at Nantes and Nice.

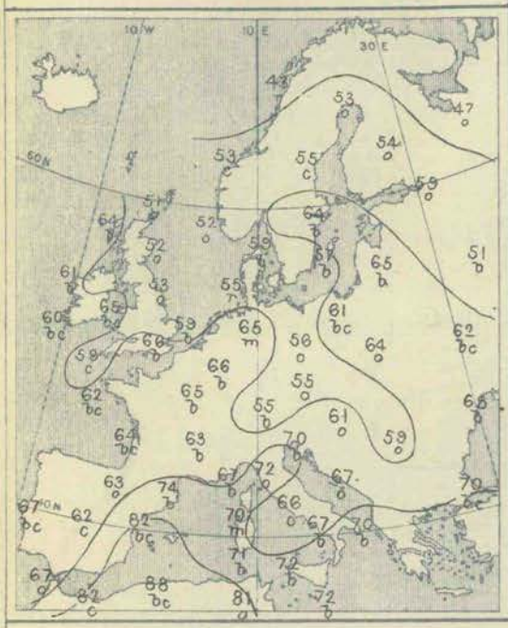
Temperature risen a little over Scandinavia, Denmark, and the eastern parts of Great Britain, fallen in the south of England, changed irregularly elsewhere. Morning readings highest, 85° at Algiers, 82° at Oran, and 77° at La Calle; above 65° over southern Europe generally. Lowest, (1) 41° at Archangel, 46° at Haparanda, and 48° at Bodö; (2) 51° at Oxford, and 52° at Loughborough and in London; below 55° over all the eastern and central parts of England. Rising during day to 70° or more in many parts of Ireland and the west of Scotland and also at Cambridge, but remaining below 60° on our east coasts. Exceeding 80° over the greater part of southern Europe, and reaching 90° at Perpignan.

Wind Easterly or North-Easterly over Ireland, England, the Netherlands, Germany, and the greater part of France; light or moderate in force generally, but strong at the mouth of the Channel. Light from the Southward in Scotland. Strong from the South-Westward over the northern parts of Scandinavia. Northerly at most of the Russian stations; variable in Italy, South-Westerly in Spain and Algeria, Westerly in the south of France. No important change occurring later.

Barometer highest, 30·1 ins. to 30·2 ins. in a large anticyclone covering the greater part of our Islands, with the North Sea, the Netherlands, Denmark, Finland, and the southern half of Scandinavia; 30·0 ins. and upwards in two other systems lying respectively over the south of Spain and the central parts of the Mediterranean. Lowest, 29·8 ins. and less in a shallow depression over the south of Russia; 29·9 ins. and less in another shallow system over the west of France, and also in a more important disturbance off the north-west of Norway. French depression subsequently moving slowly northwards; barometer falling in most parts of north-western Europe.

Tuesday, 13th June.

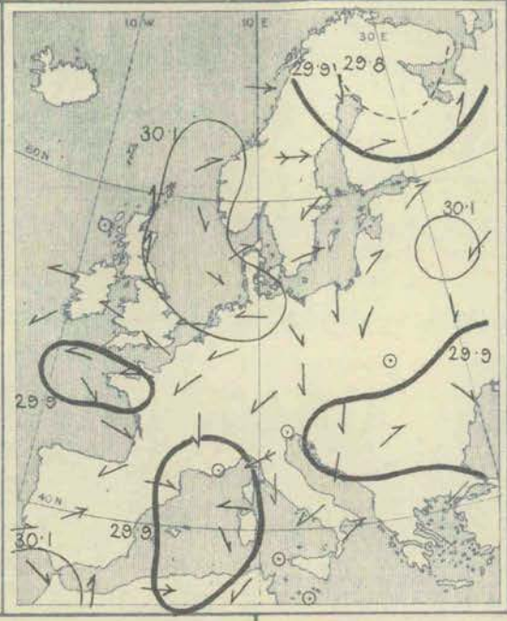
Temperature and Weather. 8 a.m.

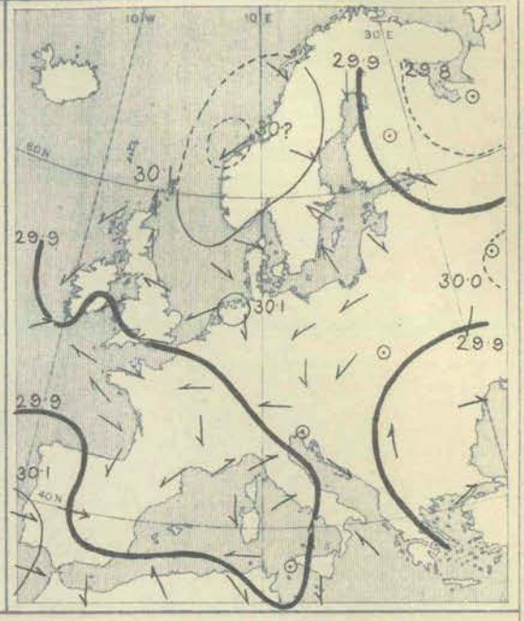


Weather fine over the greater part of our Islands and the Continent, but foggy or misty at several of our own northern and eastern stations. Dull over the northern parts of Russia and Scandinavia, as well as over eastern Germany, Austria, and northern Italy, rainy at Bodö, Fanö, and Vienna. Thunderstorms occurring later at Holyhead and Jersey, and also in the south of France; heavy rain falling in the north-west of France, and small quantities in the Channel Islands and south of Devonshire.

Temperature fallen in Ireland and Scotland, risen in most other countries—quickly over the south-eastern parts of England. Morning readings highest, 88° at Algiers and Aumale, 82° at Barcelona, and 81° at La Calle and Tunis; above 70° at the Mediterranean stations generally, and above 65° over Belgium and the inland parts of the south-east of England. Lowest, 43° at Bodö, 47° at Archangel, 51° at Moscow and Sumburgh Head, and 52° to 53° on the north-east coasts of Great Britain. Rising during day to 70° and upwards at several of our western and southern stations, to 75° and upwards over central England, and to 81° at Cambridge. Rounding 82° at Paris, 86° at Barcelona, and 88° at Perpignan.

Barometer and Wind. 8 a.m. and 6 p.m.



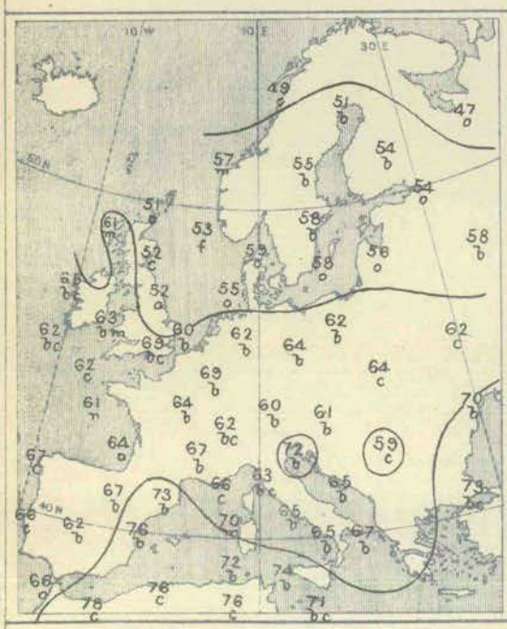


Wind light to moderate from the Eastward or North-Eastward over Ireland, England, the Netherlands, western Germany, central France, and the greater part of Italy; Westerly over Spain and the Bay of Biscay. Light from the Southward in the north and east of Scotland. Westerly over the northern parts of Scandinavia and Russia, with a gale at Hernösand. Light from the Northward or North-Westward over eastern Germany, Austria, and the central and southern parts of Russia. No important change occurring during day.

Barometer highest, 30·1 ins. and upwards in a large anticyclone lying over Denmark, the North Sea, and the west of Norway, as well as in smaller areas lying respectively over central Russia, and over Morocco and the extreme south of Spain. Lowest, 29·8 ins. and less in a depression over Lapland, and in a small disturbance near Kharkov; 29·9 ins. and less in shallow systems lying respectively over the north-west of France and the western parts of the English Channel, and over the western part of the Mediterranean. Further shallow disturbances forming later over France; barometer falling in nearly all parts of western Europe.

Wednesday, 14th June.

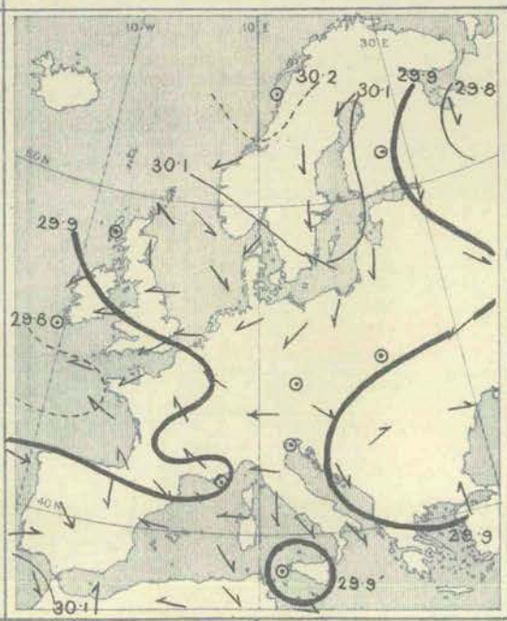
Temperature and Weather. 8 a.m.

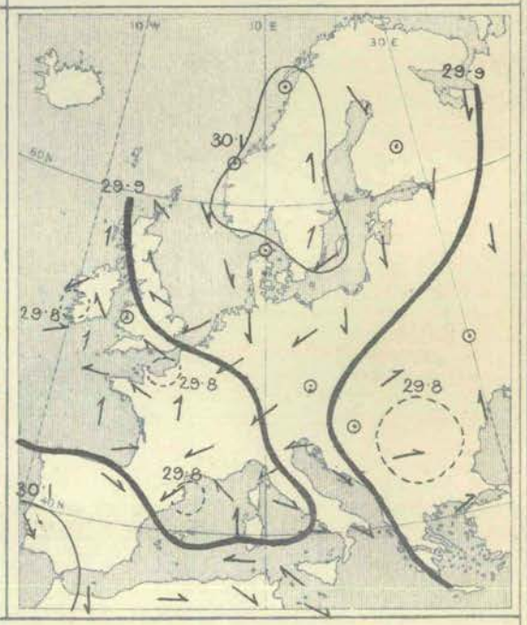


Weather in morning fine and bright at almost all stations excepting those in Brittany and some parts of England, where sky was overcast; rain falling at Lorient and Brest; fog prevalent at Wick. Heavy rain later at several of the French stations, amounts reaching 5·5 ins. at Gap and 2·6 ins. at Perpignan. Slight showers at the North Foreland and on our north-west coasts, thunder and lightning in many places.

Temperature risen over central Europe. Morning readings highest, 82° at Sfax, 81° at Tunis, and 65° to 75° over the Mediterranean as a whole; exceeding 60° over western and central Europe. Lowest, 47° at Archangel, 49° at Bodö, 51° at Sumburgh Head, 52° at Aberdeen and Shields, 54° at St. Petersburg. Rising later to between 80° and 85° in several parts of England, France, and southern Europe, the highest readings of all being 88° at Florence, and 86° at Cagliari and Palermo.

Barometer and Wind. 8 a.m. and 6 p.m.





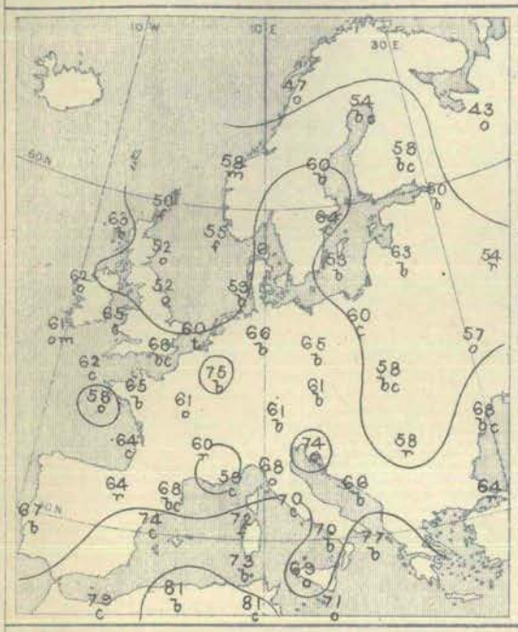
Wind light to moderate in force—Northerly over Finland and Sweden, North-Easterly over north Germany, the Netherlands, and England, Easterly in the Channel, but Westerly to North-Westerly over the Spanish Peninsula, North-Westerly over Italy. Becoming Westerly in the south-west of France later. No important change occurring elsewhere.

Barometer highest, 30·2 ins. and more to 30·0 ins. in a large anticyclone of irregular form, spreading from Lapland over Scandinavia, the North Sea, and the Baltic, to Germany; 30·1 ins. to 30·0 ins. over Algeria and the south-western half of Spain. Lowest, 29·8 ins. and less at the mouth of the English Channel and also over the north of Russia. Shallow local depressions over several parts of France. Disturbances over France increasing later, and moving northwards towards England.

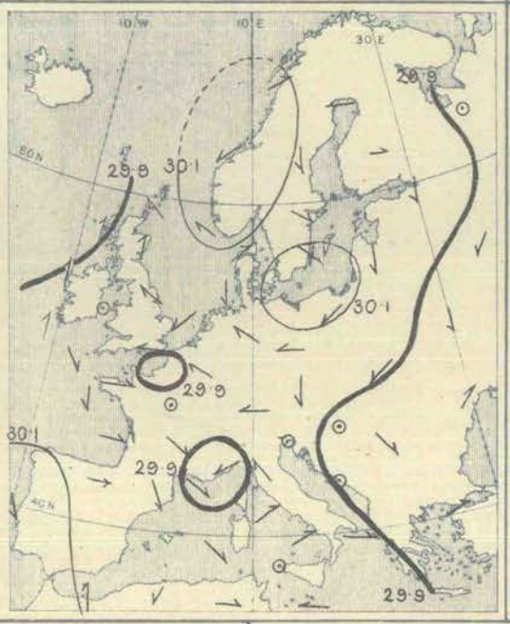
Judd & Co Ltd, Lith 63, Carter Lane.

Thursday, 15th June.

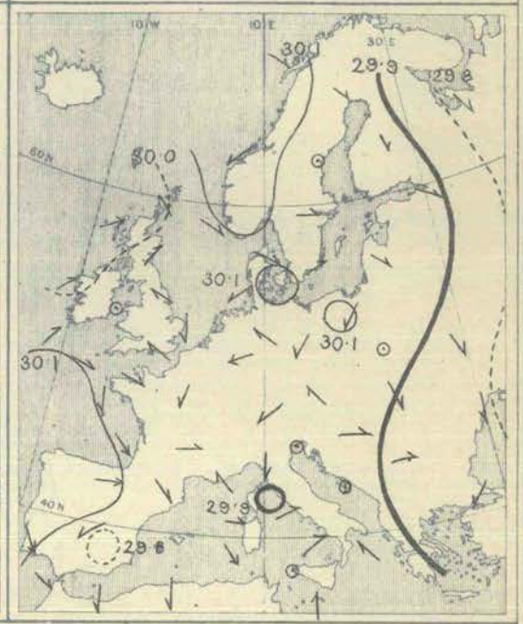
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fine and bright in most parts of the United Kingdom, as well as over northern and central Europe, Spain, southern Italy, and Algeria. Very cloudy over the greater part of France and northern Italy, with rain at Lyons, Biarritz, and Turin. Dull over south-eastern Europe, with rain at Moscow and Hermanstadt. Slight rain falling during day at one or two of our western and northern stations and thunder showers at Oxford. Larger quantities of rain occurring over the southern parts of France, and also over northern Italy and the south of Russia, with thunderstorms at Clermont and Rochefort.

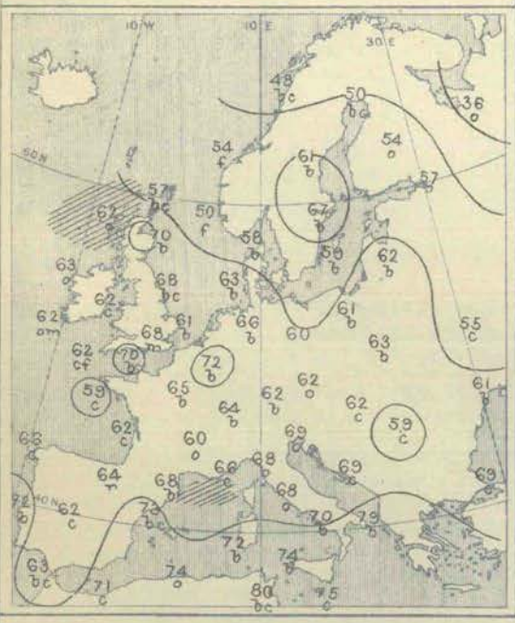
Temperature risen over the northern parts of our Islands and the Continent, fallen in most other localities. Morning readings highest, 81° at Algiers, La Calle, and Sfax, 80° at Tunis, and 79° at Oran; above 70° over the Mediterranean generally, and above 65° over the south of England. Lowest, (1) 43° at Archangel, 47° at Bodö, 50° at St. Petersburg, and 53° at Uleaborg; (2) 50° at Sumburgh Head, and 52° at Aberdeen and Shields. Rising during day to 70° or more over the greater part of our Islands and France, to between 80° and 85° over the south-eastern counties of England and many parts of southern Europe, and to 93° at Palermo.

Wind light from the Southward over the greater part of Ireland and Scotland; North-Easterly over the eastern parts of England, Northerly or North-Westerly over our south-western counties and the north-west of France, Westerly in the south-west of France. Variable over Scandinavia and northern Russia, Northerly over central Russia, North-Easterly or Easterly in Germany. Variable in Austria, chiefly South-Westerly in Italy. Subsequently veering to the South-Westward in Ireland and Scotland, and becoming rather variable in the south-east of England; no decided change occurring elsewhere.

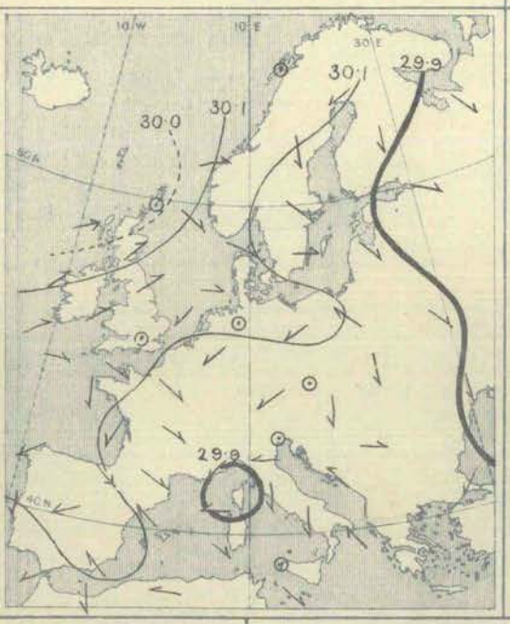
Barometer highest, 30·1 ins. and upwards in three separate areas—one lying over Norway, another over the Baltic and the south of Sweden, and the third over the western parts of the Spanish Peninsula. Lowest, 29·8 ins. and less over the Black Sea and the southern parts of Russia, 29·9 ins. and less in a large depression lying to the north-westward of our Islands, and also in three smaller systems lying (1) over the south-east of England and the north-east of France, (2) near Rochefort, and (3) over the Gulf of Genoa and its immediate neighbourhood. Depression off our north-west coasts subsequently moving northwards.

Friday, 16th June.

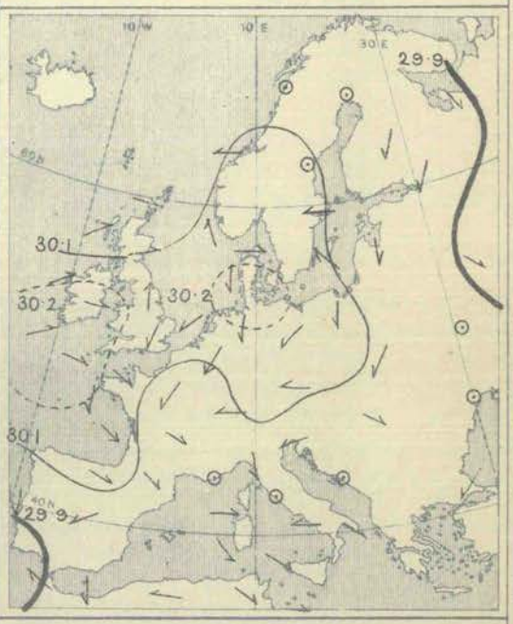
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fine over the greater part of the United Kingdom and the Continent, but foggy at the mouths of the English and Bristol Channels, as well as in the west of Norway. Dull in the extreme west and north-west of our Islands, with showers at Malin Head, dull also over the south of France and northern Italy. Slight rain falling later in the Hebrides and at some of the German stations, and larger quantities in the west of Norway and south of France; thunderstorms occurring at several of the western and southern French stations.

Temperature risen in most countries, but fallen in Norway and Russia, and also in Algeria. Morning readings highest, (1) 80° at Sfax, 79° at Brindisi, and 75° at Malta; (2) 70° at Wick, Aberdeen, Donaghadee, Liverpool, and Prawle Point. Lowest, 36° at Archangel, 48° at Bodö, 50° at Haparanda, Uleaborg, and Skudesnaes, and 54° at Kuopio and Christiansund. Rising during day to between 75° and 80° in the east of Scotland, and to between 80° and 85° over the inland parts of England. Exceeding 80° also at many of the Continental stations, the highest reading of all being 90° at San Fernando and 88° at Lisbon.

Wind South-Westerly in Ireland, Scotland, and the west of Norway, and strong in force in the Hebrides. Light from the North-East over Germany, the Netherlands, and the east and south-east of England, and from the North-Westward over the south-west of England and the greater part of France. Northerly or North-Westerly over Sweden and Russia, variable in Italy. Easterly or North-Easterly in Spain. No important change occurring during day.

Barometer highest, 30·2 ins. and upwards in an anticyclone lying to the south-westward of our Islands; 30·1 ins. and upwards over the greater part of western and north-western Europe, but below 30·0 ins. in a large shallow depression lying to the northward of our Islands. Lowest, 29·8 ins. and less over the southern parts of Russia; 29·9 ins. and less in a shallow depression lying over the Gulf of Genoa. Depression in north subsequently travelling away to the north-eastward, anticyclone in south-west spreading northwards over Ireland and the west of England.

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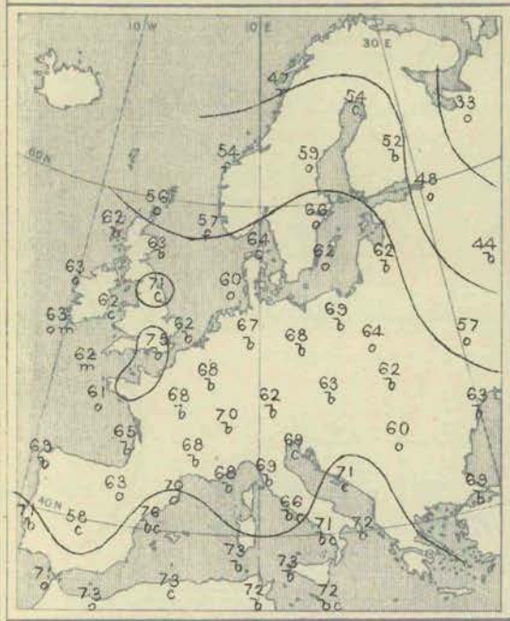
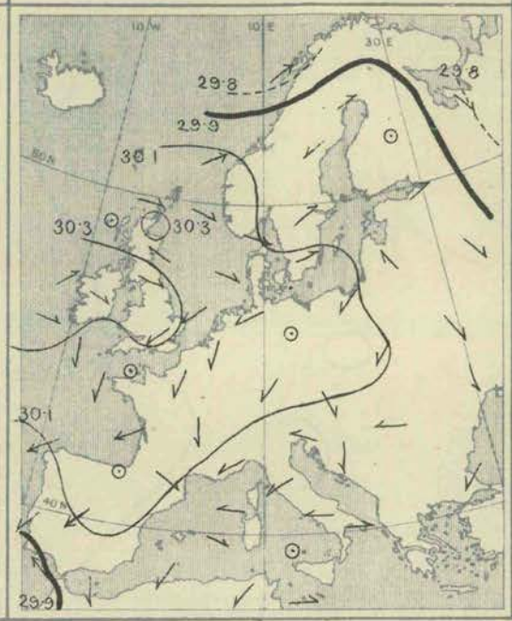
Saturday, 17th June.

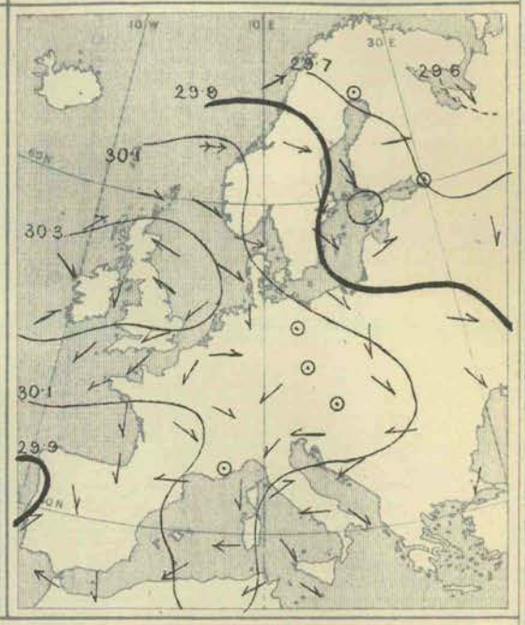
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fine over the greater part of western, central, and southern Europe, but dull in Ireland, with fog at the northern stations. Dull in Scandinavia and the extreme north of Russia, with fog in the west of Norway and with rain at Bodö. Rain falling later in the western and northern parts of Scandinavia generally, and a slight quantity in the Shetlands; thunderstorms occurring at many of the western French stations.

Temperature risen in most places. Morning readings highest, (1) 78° at Sfax, 76° at Barcelona, and 73° at Cagliari, Palermo, Nemours, and Algiers; (2) 75° in London, 73° at Jersey, 72° at Pembroke, and 71° at Shields, above 65° in most parts of western and southern Europe. Lowest, 33° at Archangel, 44° at Moscow, 47° at Bodö, 48° at St. Petersburg, and 52° at Kuopio. Rising during day to between 80° and 85° in many parts of Great Britain, and reaching 87° in London and at Cambridge. Remaining below 80° at many of the Spanish and Italian stations, but rising to 89° at Madrid.

Wind light and variable over the northern parts of the United Kingdom, but North-Easterly on our southern coasts, as well as over the Netherlands, France, Spain, and the greater part of Italy. South-Westerly in Scandinavia, and strong in force in the west of Norway; light from the North-Westward in many parts of Russia and central Europe. Westerly and South-Westerly breezes setting in later over the greater part of Scotland; no important change occurring elsewhere, but wind increasing to a gale from the westward at Christiansund.

Barometer highest, 30·2 ins. to 30·3 ins. and upwards in a large anticyclone covering our Islands, the North Sea, Denmark, Germany, the Netherlands, and the north of France. Lowest, 29·8 ins. and less in a well-marked depression lying off the north-west of Norway, and also in a shallower system over northern Russia; 29·9 ins. and less in a third disturbance lying off the south-west of Spain. Very little change occurring during day, but depression off north-west of Norway spreading south-eastwards.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are show by arrows, which are drawn flying *with the wind*, the force is indicated thus : ⟶ = a heavy gale; → = a gale; → = a fresh to strong breeze; → = a light to moderate breese: and ⊙ = a calm. In the left-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Germany, Sweden, and Norway, and 7 a.m. in France, Algeria, Italy, Austria, and Russia; that for 6 p.m. is prepared from observations made at 6 p.m. in the British Islands and France, 7 p.m. in Algeria, 8 p.m. in Sweden and Norway, Germany, and Austria, and 9 p.m. in Russia, Belgium, and Italy. The time indicated in each case is the standard time for each country.

GENERAL NOTES.

At the commencement of the week a large anticyclone covered the whole of north-western and a considerable portion of central Europe, so that fair dry weather prevailed generally. A complex low pressure system was, however, soon developed over Spain, France, and the western parts of the Mediterranean, and between the 12th and 14th, when this spread northwards, thunderstorms and rain occurred in many parts of western Europe. In our Islands the rainfall was mostly very slight, and in some instances the thunder and lightning were unattended by any precipitation whatever. In France, however, some heavy falls were reported, especially on the 14th. On the 15th the low pressure system gradually filled up, and during the remainder of the week the conditions again became anticyclonic over nearly the whole of Europe, the central portion of the high-pressure area being found directly over our Islands. The temperatures registered over the United Kingdom during the three concluding days were exceedingly high, the daily maxima being above 80° in many parts of Ireland and Scotland, and above 85° over the inland parts of England.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 140.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	74·5	?	62	?	EASTBOURNE	77·7	?	68	?
OSWALDKIRK (Yorkshire)	59·1	?	50	?	TENBY	69·2*	?	60*	?
WORKSOP	53·1	+13·4	46	+15	NEWQUAY	62·2	?	55	?
THURCASTON (Leicestershire)	54·5	+17·1	47	+15	TORQUAY	74·5*	?	66*	?
MARGATE	63·5	?	56	?	ARLEY COTTAGE (County Cavan)	42·1	?	36	?
WESTBOURNE (Sussex)	75·0*	?	66*	?	GUERNSEY	81·2*	?	72*	?
BRIGHTON	71·2	?	62	?					

* The values at Westbourne, Tenby, Torquay and Guernsey are obtained by Jordan's Photographic Recorder.

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WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W. R. H. SCOTT, F.R.S., SECRETARY.

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VOL. X. No. 25.] *Third Series.* WEEK ENDING SATURDAY, 24TH JUNE, 1893. [*Price 6d.* [*Annual Subscription, post paid*, £1 10s. 0d.

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871-90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the twenty-five years 1866-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90 only BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the ten years 1881-90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

DISTRICTS. (See p. 140.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 1st, 1893. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
	°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts. **0.** SCOTLAND, NORTH	79	42	59·2	48·3	53·4	0 (average)	80	+15	0	− 1	914	+341	485	− 57
1. SCOTLAND, EAST	90	42	64·3	49·1	56·2	1 above.	99	+13	0	0	1038	+260	548	− 21
2. ENGLAND, N.E.	86	45	64·9	51·7	57·9	2 above.	111	+19	0	0	1056	+279	436	− 62
3. ENGLAND, EAST	88	45	68·7	51·4	59·5	1 above.	123	+18	0	0	1299	+343	524	− 37
4. MIDLAND COUNTIES	87	43	69·9	51·5	60·0	2 above.	126	+21	0	0	1427	+445	505	− 47
5. ENGLAND, SOUTH	91	44	70·7	53·3	61·4	3 above.	136	+24	0	0	1449	+387	373	− 43
Principal Grazing, &c., Districts. **6.** SCOTLAND, WEST	81	39	63·9	49·2	56·0	1 above.	98	+ 9	0	0	1161	+353	354	− 63
7. ENGLAND, N.W.	85	44	65·4	52·4	58·5	2 above.	116	+19	0	0	1293	+436	323	− 91
8. ENGLAND, S.W.	90	41	70·9	53·3	61·5	4 above.	137	+33	0	0	1496	+486	246	− 70
9. IRELAND, NORTH	81	43	64·1	51·1	57·2	1 above.	106	+14	0	0	1295	+373	258	−104
10. IRELAND, SOUTH	81	44	68·2	51·8	59·5	2 above.	123	+21	0	0	1495	+422	178	−100
—CHANNEL ISLANDS	84	52	69·5	57·0	62·8	4 above.	146	+38	0	0	1680	+554	70	− 52

Rainfall. Bright Sunshine.

DISTRICTS. (See p. 140.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the mean for the Week.	From Jan. 1st, 1893. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 1st, 1893. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
		10ths of in.	10ths of ins.			Ins.	Ins.								
Principal Wheat-producing Districts. **0.** SCOTLAND, NORTH	4	5	3 less.	103	−11	18·0	− 3·4	24	− 20	20	−15	583	− 46	27	− 2
1. SCOTLAND, EAST	4	15	10 more.	83	− 8	10·3	− 3·0	29	− 16	24	−13	727	+ 22	33	+ 1
2. ENGLAND, N.E.	4	6	1 more.	69	−16	7·6	− 3·2	29	− 9	25	− 7	809	+181	37	+ 8
3. ENGLAND, EAST	5	5	0 (average)	69	−15	7·1	− 3·6	43	− 5	37	− 3	969	+212	44	+ 9
4. MIDLAND COUNTIES	3	4	1 less.	68	−14	7·5	− 4·7	45	+ 3	38	+ 3	906	+242	42	+ 11
5. ENGLAND, SOUTH	3	4	1 less.	64	−17	7·4	− 4·5	50	+ 3	44	+ 3	998	+288	46	+ 13
Principal Grazing, &c., Districts. **6.** SCOTLAND, WEST	2	5	2 less.	83	−14	14·7	− 7·2	49	+ 6	41	+ 4	811	+120	37	+ 5
7. ENGLAND, N.W.	3	6	0 (average)	72	−17	9·7	− 4·1	34	− 7	29	− 5	814	+135	37	+ 6
8. ENGLAND, S.W.	3	3	3 less.	67	−25	11·1	− 6·0	76	+ 28	67	+24	1078	+281	50	+ 13
9. IRELAND, NORTH	3	2	4 less.	88*	−15	11·6	− 3·8	48	+ 11	41	+ 9	668	− 3	31	0
10. IRELAND, SOUTH	3	2	4 less.	76	−21	12·3	− 5·3	57	+ 15	49	+14	781	+ 21	36	+ 1
—CHANNEL ISLANDS	1	1	4 less.	70	−29	8·9	− 5·2	87	+ 31	77	+28	1236	+316	57	+ 15

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather continued fine and dry generally during the earlier part of the period, but some thunder and lightning, accompanied by slight local rain, occurred at some south-eastern and southern stations. After the middle of the week, however, the conditions became unsettled and rainy at nearly all stations, the fall experienced in the east of Scotland being decidedly heavy.

Temperature was considerably above the mean during the early days, but fell very suddenly during the night of the 19th to 20th, and became somewhat low for the time of year. The average values for the whole week just equalled the normal in the north of Scotland, and slightly exceeded it in most other districts; in England S.W. and the Channel Islands, however, the excess amounted to 4°. The highest of the maxima occurred on the 18th in the northern and western districts, and on the 19th in the south and east; they were very high generally, ranging from 91° in England S., and 90° in England S.W. and Scotland E., to 81° in Scotland W. and over Ireland, and to 79° in Scotland N. The lowest of the minima were recorded either on the 23rd or 24th, and ranged from 39° in Scotland W., and 41° in England S.W., to 45° in England E. and N.E., and to 52° in the Channel Islands.

Rainfall greatly exceeded the mean in Scotland E., and just equalled it in England E. and N.W.; in all other districts there was again a deficit, although the amount recorded over our south-eastern and central counties was more considerable than any experienced in those localities for many weeks past.

Bright Sunshine again exceeded the mean in Ireland and the greater part of England, but was below it in the north and east of Scotland and the northern and north-eastern parts of England. The percentage of the possible duration ranged from 77 in the Channel Islands, and 67 in England S.W., to 49 in Ireland S., 44 in England S., and to 20 in Scotland N.

Barometer and Wind.—At the commencement of the week the distribution of pressure was anticyclonic, with Westerly winds in the north and Easterly winds in the south. By the 20th, the anticyclone had moved westwards to the Atlantic, and some small shallow depressions were found in different parts of our Islands. During the latter part of the week a well-marked depression of increasing area and intensity moved southwards from the north of Scotland to the north-east of England, and subsequently in an easterly and north-easterly direction over the North Sea. This system caused Easterly winds in the north, fresh or strong Northerly winds in the west, and moderate winds from the Westward in the south.

* This value has been altered slightly owing to the receipt of additional information for a preceding week.

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II.—DATA from which the SUMMARY on page 145 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°				Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	58	44	53·7	46·6	49·9	− 0·4	55	0	4	0·10	−0·38	*	*	*	*
	Stornoway	76	45	58·7	49·0	53·5	+ 1·0	81	0	5	0·68	−0·02	21·4	−19·5	17	−15
	Wick	74	42	58·7	47·3	52·7	− 0·1	75	0	6	0·35	−0·07	*	*	*	*
	Lairg ℒ												*	*	*	*
	Glencarron ℒ	73	43	59·2	47·6	53·0	+ 0·3	77	0	5	0·60	−0·64	*	*	*	*
	Fort Augustus ℒ	79	46	64·3	50·3	56·8	+ 1·9	104	0	4	0·37	−0·20	2·6	?	17	?
	Fort William ℒ	70	45	60·7	49·1	54·5	− 0·9	88	0	2	0·62	−0·36	31·2	?	25	?
1. SCOTLAND, E.	Nairn	83	46	63·4	50·7	56·6	+ 0·9	102	0	5	1·00	+0·58	*	*	*	*
	Aberdeen	72	47	59·9	51·1	55·2	+ 0·4	92	0	5	2·35	+1·93	27·8	−16·6	23	−13
	Braemar ℒ	83	43	60·9	46·4	53·2	+ 0·3	78	0	4	1·28	+0·69	30·5†	?†	25†	?†
	Ochtertyre ℒ	90	42	70·4	46·3	57·4	+ 2·0	108	0	2	1·22	+0·57	*	*	*	*
	Leith	83	47	67·0	51·0	58·4	+ 2·0	115	0	2	1·28	+0·82	*	*	*	*
	Marchmont ℒ	84	42	64·4	49·1	56·2	+ 1·6	99	0	3	1·98	+1·36	28·8	?	24	?
2. ENGLAND, N.E.	Alnwick Castle	75	46	64·3	50·9	57·1	+ 2·6	106	0	4	0·87	+0·38	*	*	*	*
	Durham	86	45	66·9	50·0	57·9	+ 1·5	111	0	4	0·38	−0·09	28·5	− 8·5	24	− 7
	Shields	75	47	63·1	51·3	56·8	+ 1·2	104	0	4	0·65	+0·23	*	*	*	*
	Scarborough ℳ	79	49	64·5	52·8	58·2	+ 1·7	113	0	4	0·79	+0·31	*	*	*	*
	York	85	50	68·6	52·3	59·9	+ 2·1	125	0	4	0·51	−0·01	29·0	− 9·7	25	− 7
	Spurn Head	70	51	62·0	53·0	57·2	+ 0·5	106	0	3	0·20	−0·15	*	*	*	*
3. ENGLAND, E.	Hillington ℳ	86	48	69·8	51·2	59·9	+ 1·9	125	0	4	0·54	+0·02	40·6	− 3·0	35	− 4
	Yarmouth	68	50	62·9	53·6	57·9	+ 0·5	111	0	5	0·51	+0·03	*	*	*	*
	Geldeston	83	45	67·9	49·9	58·3	+ 0·6	114	0	5	0·45	+0·05	48·2	+ 0·2	42	0
	Cambridge	88	48	72·6	51·4	61·3	+ 2·2	135	0	5	0·74	+0·21	41·0	− 2·8	35	− 3
	Rothamsted	86	47	70·4	50·9	60·0	+ 2·0	126	0	4	0·42	−0·13	41·1	?	35	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	87	43	70·4	49·6	59·1	+ 1·0	120	0	4	0·35	−0·18	*	*	*	*
	Loughborough	86	48	71·3	52·1	61·0	+ 1·6	133	0	2	0·38	−0·14	*	*	*	*
	Stamford (Ketton Hall)	87	48	71·4	51·3	60·7	+ 1·6	131	0	3	0·36	−0·12	*	*	*	*
	Cheadle ℳ	81	45	65·5	51·3	57·9	+ 2·2	111	0	4	0·59	−0·09	*	*	*	*
	Churchstoke ℳ	81	45	68·4	49·4	58·2	+ 2·2	113	0	3	0·38	−0·13	53·0	+12·2	45	+ 9
	Hereford ℳ	83	48	70·8	52·3	60·9	+ 2·5	132	0	3	0·39	−0·11	*	*	*	*
	Cirencester	85	47	70·7	52·1	60·8	+ 3·8	132	0	3	0·56	−0·01	48·0	+ 5·8	41	+ 4
	Oxford	86	49	70·6	53·9	61·7	+ 3·2	138	0	4	0·30	−0·22	45·9	+ 3·0	40	+ 2
5. ENGLAND, S.	London	88	49	72·4	53·0	62·0	+ 1·7	140	0	3	0·40	−0·11	39·8†	+ 0·8†	34†	0†
	North Foreland	72	49	65·3	53·6	59·0	+ 1·4	119	0	4	0·51	?	*	*	*	*
	Strathfield Turgiss ℳ	90	44	73·2	48·5	60·0	+ 0·9	126	0	4	0·26	−0·22	*	*	*	*
	Dungeness	72	47	67·0	54·6	60·4	+ 1·7	129	0	4	0·15	−0·23	*	*	*	*
	Hastings (St. Leonards)	82	49	70·4	54·0	61·6	+ 2·9	137	0	4	0·39	−0·01	55·6	+ 5·9	49	+ 5
	Southampton	91	50	74·6	53·7	63·3	+ 3·7	149	0	3	0·24	−0·17	51·9	+ 5·1	46	+ 4
	Hurst Castle	84	50	71·1	55·9	63·0	+ 4·3	147	0	2	0·03	−0·44	*	*	*	*
	Stowell ℳ	86	48	71·6	53·4	61·9	+ 3·8	139	0	3	0·78	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	66	41	60·7	47·8	53·8	− 1·6	83	0	3	0·08	−1·10	*	*	*	*
	Glasgow	80	46	64·9	50·8	57·4	+ 1·8	108	0	2	0·63	−0·04	37·7	+ 0·9	31	0
	Ardrossan	72	46	62·7	49·0	55·4	− 0·9	94	0	2	0·49	−0·10	*	*	*	*
	Glenlee ℒ	81	39	66·8	48·8	57·2	+ 2·5	106	0	2	0·57	−0·21	*	*	*	*
	Douglas (Isle of Man)	76	47	64·5	49·4	56·4	+ 0·9	101	0	2	0·79	+0·27	59·7	+ 9·9	51	+ 8
7. ENGLAND, N.W.	Newton Reigny	85	44	69·9	50·0	59·3	+ 4·2	121	0	3	0·81	+0·29	30·0	−13·8	25	−11
	Stonyhurst	82	48	65·8	52·4	58·6	+ 2·1	116	0	3	0·78	−0·03	27·8	−14·0	24	−12
	Blackpool ℳ	80	51	65·6	54·1	59·5	+ 2·8	123	0	2	0·48	−0·02	38·5	− 4·4	33	− 3
	Manchester	84	46	65·1	51·6	57·9	+ 1·0	111	0	3	0.56	−0·15	25·2†	?	22†	?
	Liverpool Obsy. (Bidston)	85	50	65·9	54·1	59·6	+ 1·6	123	0	3	0·72	+0·22	*	*	*	*
	Llandudno ℳ	74	49	64·4	52·8	58·2	+ 0·3	113	0	2	0·54	+0·12	48·6	+ 8·3	42	+ 7
	Holyhead	64	49	60·9	52·0	56·1	− 0·8	99	0	3	0·21	−0·26	*	*	*	*
8. ENGLAND, S.W.	Llandovery	88	41	73·7	48·6	60·3	+ 2·3	128	0	3	0·63	−0·08	*	*	*	*
	Pembroke	79	50	65·7	55·0	60·0	+ 3·5	126	0	1	0·01	−0·46	66·2	+12·5	57	+10
	Bristol (Montpelier)	90	51	74·5	55·9	64·6	+ 5·1	158	0	4	0·60	?	*	*	*	*
	Arlington (N. Devon)	84	46	69·4	50·1	59·1	+ 2·9	120	0	2	0·38	−0·44	*	*	*	*
	Cullompton ℳ	89	45	74·2	49·8	61·2	+ 3·1	134	0	2	0·22	−0·36	69·2	+25·2	61	+22
	Falmouth	80	51	68·8	54·9	61·4	+ 3·5	136	0	3	0·27	−0·35	91·0	+38·5	81	+34
	Plymouth	85	51	72·0	55·5	63·2	+ 3·6	148	0	3	0·17	−0·22	81·3	+34·8	72	+30
	Prawle Point	76	51	69·1	56·4	62·3	+ 5·8	142	0	2	0·11	−0·28	*	*	*	*
9. IRELAND, N.	Malin Head	65	49	58·9	53·1	55·8	+ 0·1	97	0	4	0·10	?	*	*	*	*
	Londonderry	81	47	65·8	51·0	57·9	+ 0·8	111	0	2	0·13	−0·48	*	*	*	*
	Edenfel (Omagh)	79	46	64·6	50·4	57·0	+ 0·8	105	0	3	0·28	−0·34	*	*	*	*
	Belmullet	73	49	62·3	53·1	57·4	+ 1·7	108	0	4	0·54	?	*	*	*	*
	Markree Castle	75	44	63·6	50·2	56·4	+ 1·2	101	0	3	0·31	−0·46	59·0	+24·0	50	+20
	Brookeborough	80	46	66·3	49·7	57·4	+ 2·0	108	0	3	0·31	−0·39	*	*	*	*
	Armagh	78	43	65·2	48·5	56·3	0·0	100	0	2	0·11	−0·41	38·4	− 0·1	33	0
	Donaghadee	68	49	63·6	54·9	59·0	+ 3·3	119	0	2	0·10	−0·38	*	*	*	*
	Edgeworthstown	81	44	66·5	49·4	57·4	+ 1·5	108	0	3	0·17	−0·54	*	*	*	*
10. IRELAND, S.	Dublin	75	47	65·8	53·2	59·1	+ 0·8	120	0	3	0·31	−0·12	52·4	+11·1	45	+10
	Parsonstown	80	44	67·7	48·9	57·7	+ 1·1	110	0	3	0·50	−0·08	43·9	+ 4·4	35	+ 4
	Kilkenny	81	46	67·7	51·6	59·1	+ 2·9	120	0	3	0·19	−0·32	*	*	*	*
	Waterford	81	46	71·1	51·8	60·8	+ 2·9	132	0	2	0·13	−0·45	*	*	*	*
	Roche's Point	73	50	67·9	54·9	61·0	+ 2·8	133	0	0	—	−0·72	*	*	*	*
	Valencia	80	48	67·7	52·1	59·4	+ 2·4	122	0	4	0·38	−0·42	73·4	+29·1	63	+24
	Killarney	81	44	69·1	49·8	58·8	+ 2·4	118	0	3	0·29	?	*	*	*	*
	Foynes	80	50	68·6	52·4	59·9	+ 3·0	125	0	4	0·09	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	75	52	67·0	55·9	61·1	+ 3·4	134	0	2	0·18	−0·28	*	*	*	*
	Jersey	84	54	72·0	58·0	64·5	+ 5·1	158	0	1	0·02	−0·45	85·4	+31·6	76	+28

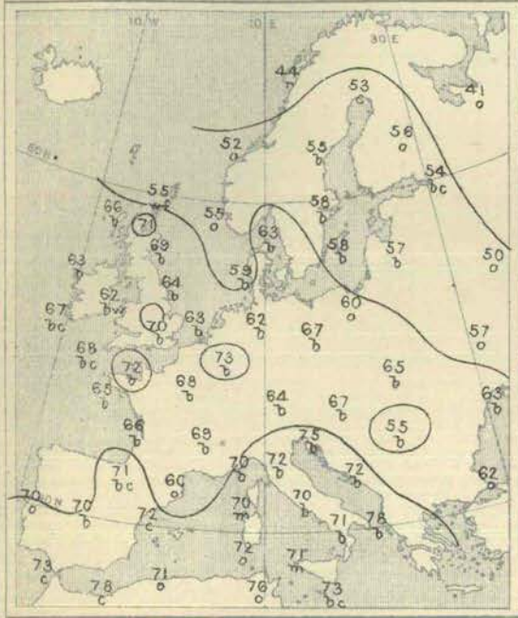
Stations marked ℳ are in connection with the Royal Meteorological Society, and those marked ℒ with the Scottish Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

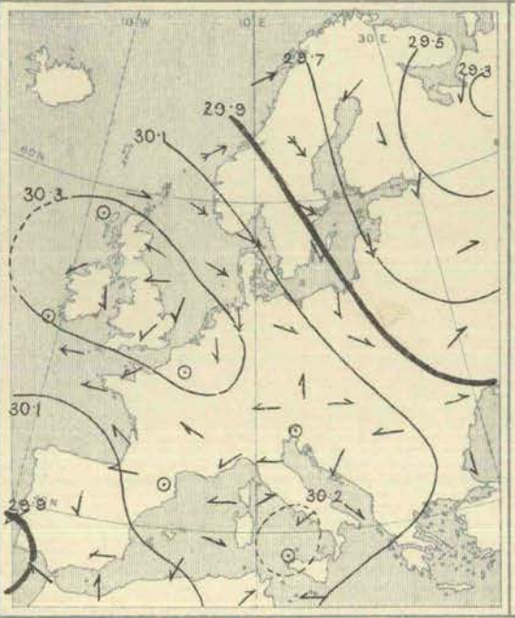
† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row) at the Kew Observatory, and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

Sunday, 18th June.

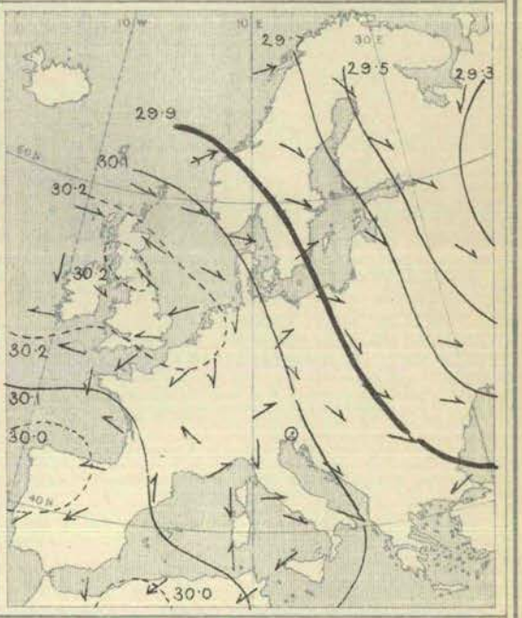
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over our Islands and the greater part of the Continent, dull in the west of Norway (with rain at Bodö) and over a considerable portion of Russia, Spain, and Algeria. Slight rain later in the extreme north of Scotland, and thunderstorms at Valencia (Ireland), Biarritz, and Madrid, considerable falls in various parts of Russia. Remaining fine and dry over western Europe generally.

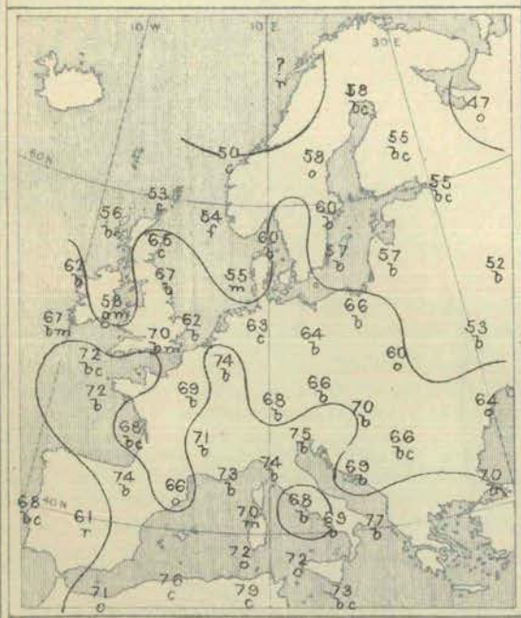
Temperature fallen in the central parts of the United Kingdom, as well as over Denmark and the Baltic, but risen in most other localities. Morning readings highest, (1) 78° at Brindisi, Oran, and Sfax, 76° at La Calle, and 75° at Tunis; (2) 72° at Leith and Liverpool, 71° at Wick, and 70° at Loughborough, Roche's Point, and Prawle Point, above 65° in most parts of the United Kingdom. Lowest, 41° at Archangel, 44° at Bodö, 50° at Moscow, 52° at Christiansund. Rising later to between 80° and 85° in many parts of our Islands, reaching 86° at Loughborough and Cambridge. Exceeding 85° at most French stations; highest of all, 91° at Brest and Rochefort.

Wind light to moderate from the Eastward or North-Eastward over England, Ireland, France, and Spain, variable in Italy, South-Easterly or Southerly in Algeria. Light and variable in Scotland; strong to a gale from the Westward or South-Westward in the west of Norway, and from the North-Westward in Sweden and Denmark, moderate to fresh from the North-Westward or Northward over Finland, the Baltic, and Poland; Westerly in Austria, South-Westerly over the southern parts of Russia. No important change occurring over western Europe during day.

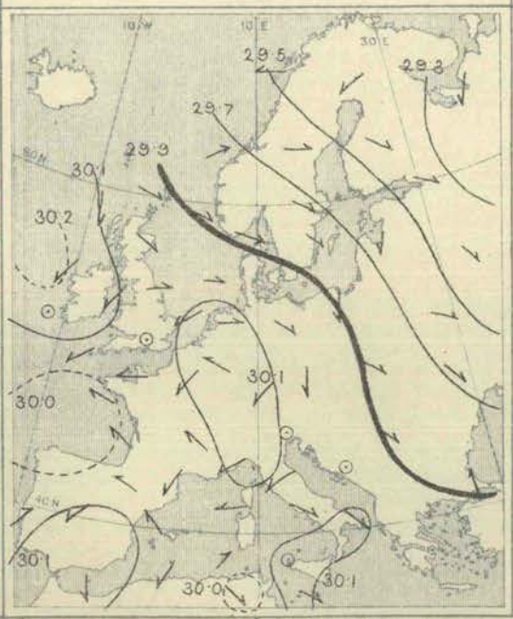
Barometer highest, 30·3 ins. and upwards in an anticyclone covering nearly the whole of our Islands, the Netherlands, and the North Sea. Lowest, 29·3 ins. and less in a depression lying over the north of Russia; 29·9 ins. and less in a shallow system lying off the south-west of Spain. General fall of barometer taking place over western Europe during day, and a decided fall over Russia. Depression over northern Russia spreading southwards.

Monday, 19th June.

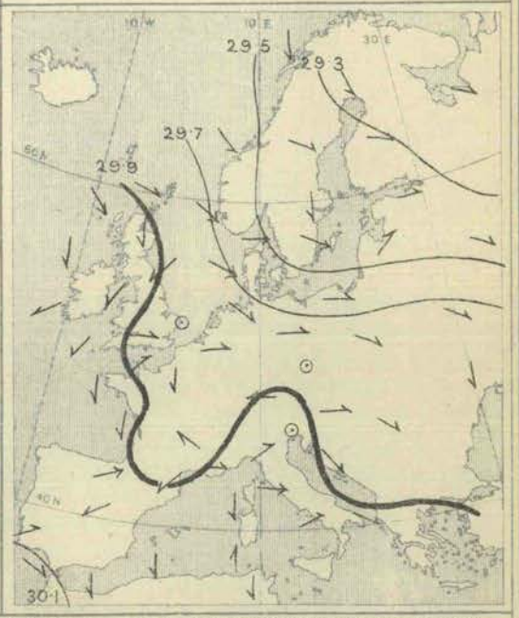
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning still fine, bright, and very warm over the eastern, southern, and south-western parts of England and Ireland, as well as over central and southern Europe; dull over Scandinavia, with rain in several places, cloudy and changeable over Scotland, the north of Ireland, and the Irish Sea. Some rain later over Sweden, and the north and east of our Islands, slight falls at the Channel stations, and a considerable amount at Limoges. Sharp thunderstorms in many southern localities. [Newspapers report them in west also with heavy rain and hail.]

Temperature beginning to give way decidedly in Scotland and the north of Ireland. Morning readings highest, 70° to 77° over many parts of the Mediterranean and southern Europe, 70° or rather more over several parts of England and the south-east of Ireland, and exceeding 60° over Ireland, England, and central Europe generally. Lowest, 47° at Archangel, 50° at Christiansund, 53° at Sumburgh Head, and 56° at Stornoway. Rising to between 80° and 88° over England later, to 90° or more in some parts of France, but decided fall in north spreading steadily in a southerly direction.

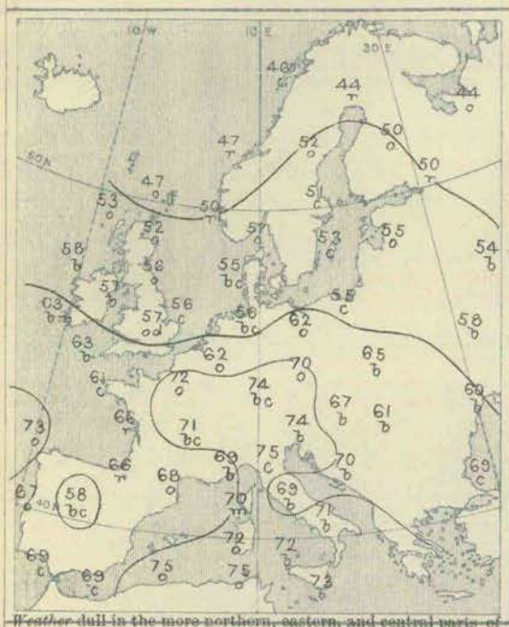
Wind North-Westerly over the whole of eastern and many parts of central and northern Europe, and moderate in force; Northerly to Westerly and variable over our Islands, North-Easterly to Easterly in the south and over the Channel, Easterly to South-Easterly over the Bay of Biscay. Very variable on the Mediterranean coasts. Becoming very variable over France and the south of our Islands later, but Northerly breeze spreading gradually to the southward over the United Kingdom and North Sea, and blowing strongly in gusts during some thunderstorms.

Barometer highest, 30·2 ins. and more to 30·1 ins. over the western parts of our Islands, and exceeding 30·1 ins. over the Netherlands, north Germany, and the east of France, as well as in the south of Italy and Sicily. Lowest, (1) about 29·2 ins. over the north of Russia, and below 29·5 ins. over nearly the whole of that country; (2) 30·0 ins. and less over the Bay of Biscay. Gradients slight over England, France, and western Germany, moderate elsewhere. Falling in western Europe later (most in France and the south-east of England), local disturbances being developed in latter districts.

Judd & Co Lt. Lith. 63, Carter Lane

Tuesday, 20th June.

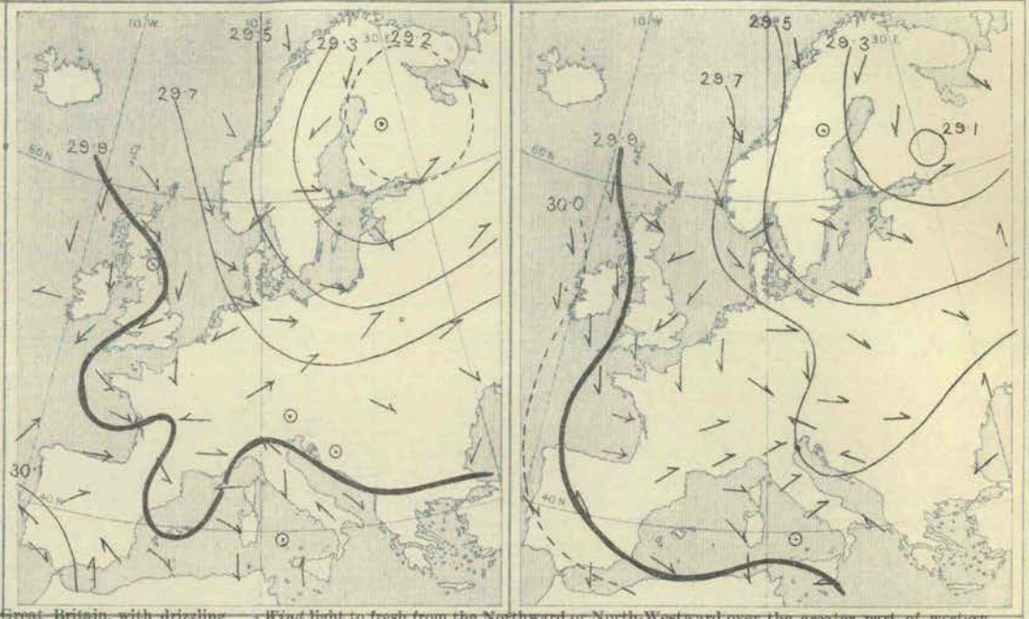
Temperature and Weather. — 8 a.m.



Weather dull in the more northern, eastern, and central parts of Great Britain, with drizzling rain in London and at Oxford; rainy in the south-west of France and also in the west of Norway; dull over Germany and the western and northern parts of Russia. Fine and bright in the west and south-west of our Islands, as well as over the greater part of southern and eastern Europe. Slight rain falling later at one or two English stations, and larger amounts in Scandinavia; thunderstorms occurring in France, with heavy rain at Paris, La Coubre, and the Puy de Dôme. Considerable rain over Austria, also at Cagliari and Berne.

Temperature fallen fast in most of the western and northern countries, as well as in Austria, but risen elsewhere. Morning readings highest, 79° at Barcelona, 77° at Sfax, and 76° at Brindisi, above 70° in many parts of central and southern Europe. Lowest, 44° at Archangel and Haparanda, 46° at Bodö, and 47° at Christiansund and Sumburgh Head; below 55° over the extreme northern parts of our Islands and the Continent generally. Daily maxima over our Islands below 70° at all but the south-western stations, and below 60° in several parts of our northern districts. Thermometer exceeding 80° over central France and in Italy, and reaching 91° at Belfort.

Barometer and Wind — 8 a.m. and 6 p.m.

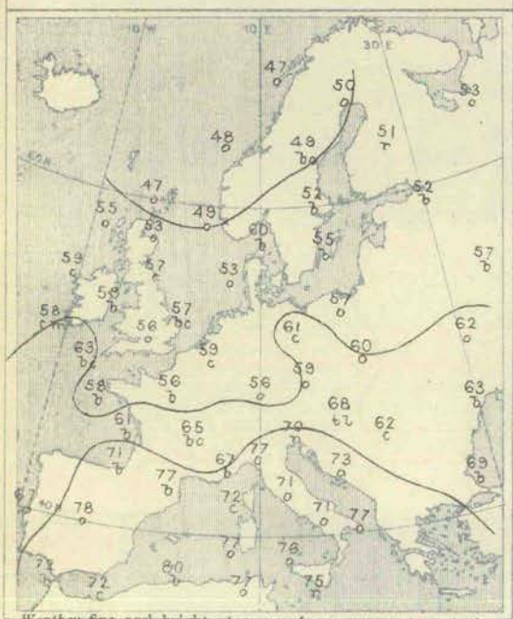


Wind light to fresh from the Northward or North-Westward over the greater part of western and northern Europe, but Easterly or North-Easterly at many of the English stations. Fresh from the Westward over north Germany, light from the South-Westward over the southern and eastern parts of Germany and the central parts of Russia. Variable in Italy, South-Easterly in Algeria and the south of Spain. Subsequently increasing to a gale from the Northward in the south-west of Norway; no important change occurring elsewhere.

Barometer highest, 30·1 ins. and upwards in the south of Spain; 30·0 ins. and upwards in a large anticyclone lying over the Atlantic and spreading eastwards over Ireland and a considerable portion of the Iberian Peninsula. Lowest, 29·2 ins. and less in a large depression over Finland and Lapland. Barometer falling slowly over western Europe during day, and depression over east of France becoming well-marked. No other change occurring in general distribution of pressure.

Wednesday, 21st June.

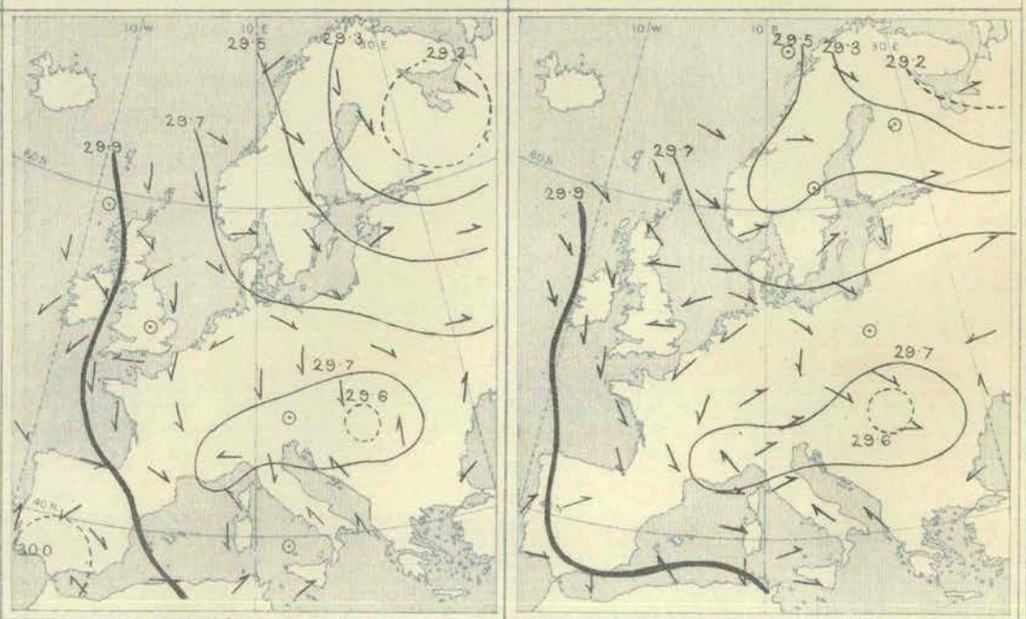
Temperature and Weather. — 8 a.m.



Weather fine and bright at many of our own western stations, as well as over France, Spain, Sweden, the Baltic, Austria, and the south of Russia. Dull elsewhere, with drizzle at Oxford, and with steady rain at Kuopio, Cracow, Lemberg, and Munich. Showers falling later in the south-east of England, with thunder at the North Foreland; rain setting in over the north of Scotland at night, and spreading southwards. Considerable falls in many parts of southern and south-eastern Europe.

Temperature fallen quickly in Germany, but changed irregularly elsewhere. Morning readings highest, 78° at Brindisi and Sfax, 76° at Barcelona, and 75° at Leghorn, Algiers, La Calle, and Malta, above 70° at most of the Mediterranean and Adriatic stations. Lowest, 47° at Bodö and Sumburgh Head, and 48° at Archangel, Kuopio, and Christiansund, below 55° over northern Europe generally, and also in the north of Scotland. Rising during day to between 65° and 69° over the inland parts of England, and reaching 72° at Jersey. Exceeding 70° at most of the French stations, touching 90° in the southern parts of Austria and Italy, and 97° at Laghouat.

Barometer and Wind — 8 a.m. and 6 p.m.



Wind light to moderate from the Northward or North-Westward in the west and north of our Islands, as well as in France, Germany, Denmark, and Scandinavia, but Southerly over the central and southern parts of England. Light from the Westward or South-Westward over the southern parts of Russia, variable in Spain and Italy. Subsequently shifting to the South-Eastward in the east of Scotland, no important change occurring elsewhere.

Barometer highest, 30·0 ins. and upwards over the Atlantic—to the westward of our Islands, and also in a small system lying over the south of Spain. Lowest, 29·2 ins. and less in a depression over the north of Russia; 29·6 ins. and less in another system lying over eastern Austria. Barometer falling slowly in our Islands during day. Russian and Austrian depressions undergoing little change, but a new one being developed over central Scotland in evening.

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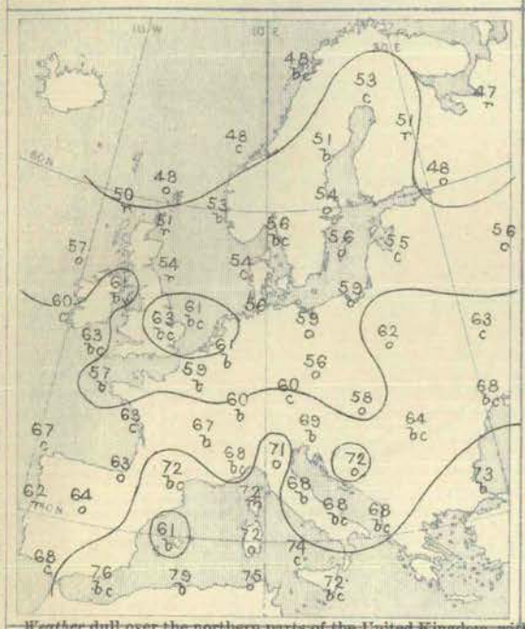
Thursday, 22nd June.

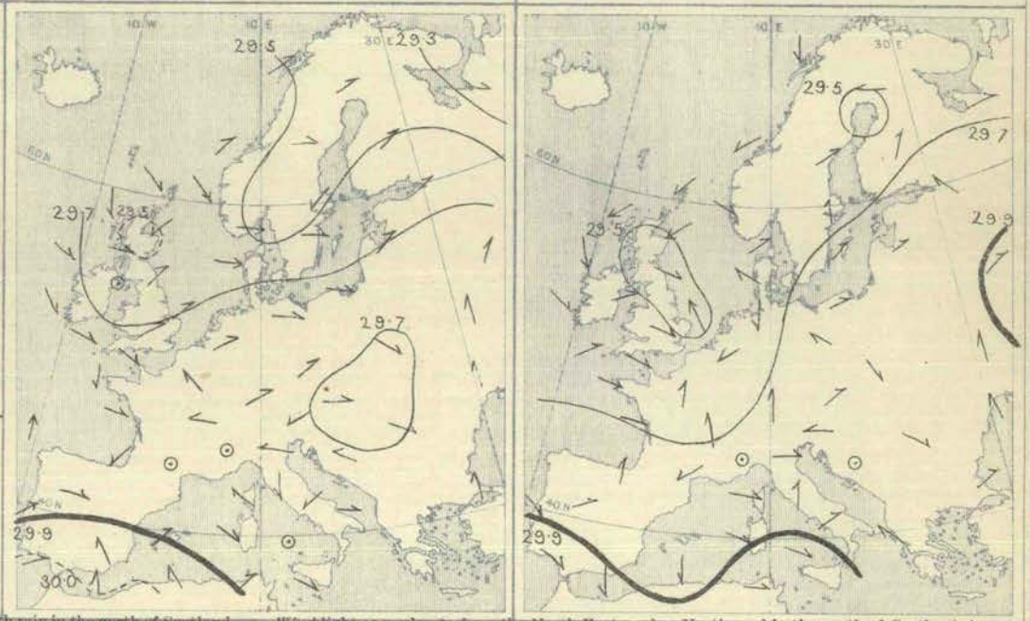
Temperature and Weather. 8 a.m.



Weather dull over the northern parts of the United Kingdom, with rain in the north of Scotland, dull also over Spain, Germany, Austria, and the northern and central parts of Russia, with rain at Lisbon, Cracow, Archangel, and Kuopio. Fair or fine in nearly all other parts of Europe. Heavy rain falling in the east of Scotland later (1·6 ins. at Aberdeen), and smaller quantities in most other parts of our Islands and France—especially in north-east and east—considerable quantities in several parts of Russia, France, Lombardy, and Spain. Thunderstorm occurring at Yarmouth, and distant thunder heard at Wick.

Temperature changed very irregularly. Morning readings highest, 81° at Palma, 79° at Algiers, 78° at Sfax, 76° at Oran, and 75° at Barcelona and La Calle; above 65° in nearly all parts of southern and eastern Europe, and above 60° in the south of our Islands. Lowest, 47° at Archangel, 48° at Bodö, Christiansund, Sumburgh Head, and St. Petersburg, and 49° at Wick, below 55° at most of the northern stations. Remaining below 60° all day on our extreme north and north-west coasts, but rising to between 70° and 75° over the south-eastern parts of England, and reaching 83° at Lyons and 86° at Palermo.

Barometer and Wind. 8 a.m. 6 p.m.

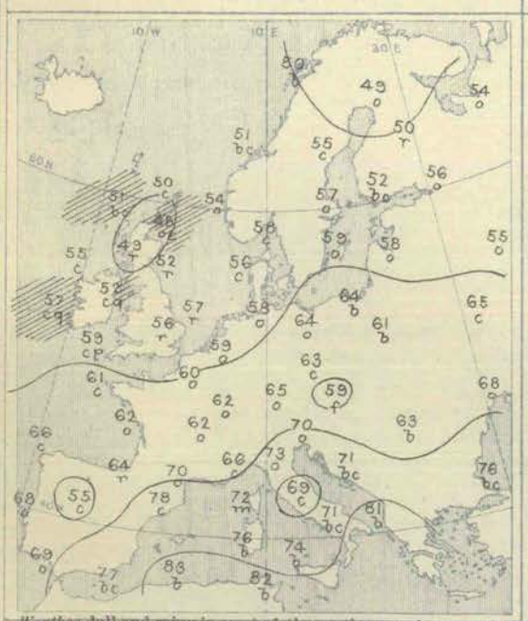


Wind light or moderate from the North-Eastward or Northward in the north of Scotland, from North-Westward on the west coasts of our Islands and France, Southerly or South-Westerly over the eastern and southern parts of England. Strong from the North-Eastward or Northward in the south of Norway, and from the Westward in Denmark—a gale at Faerder. Light from West or South-West in Germany, Easterly or North-Easterly in Italy. South-Easterly in Algeria. Subsequently increasing to a fresh or strong breeze from the North-Eastward in Scotland, and from the Westward or South-Westward in the eastern parts of the Channel.

Barometer highest, 30·0 ins. and upwards over Algeria and the extreme south of Spain, 29·8 ins. and upwards over the Black Sea and the southern parts of Russia. Lowest, 29·3 ins. and less in the extreme north of Russia and White Sea; 29·6 ins. and less in a shallow depression lying over Scotland, 29·7 ins. and less in another shallow system over eastern Austria. Depression over Scotland subsequently increasing both in size and depth, and moving slowly southwards, barometer falling decidedly over Ireland and England.

Friday, 23rd June.

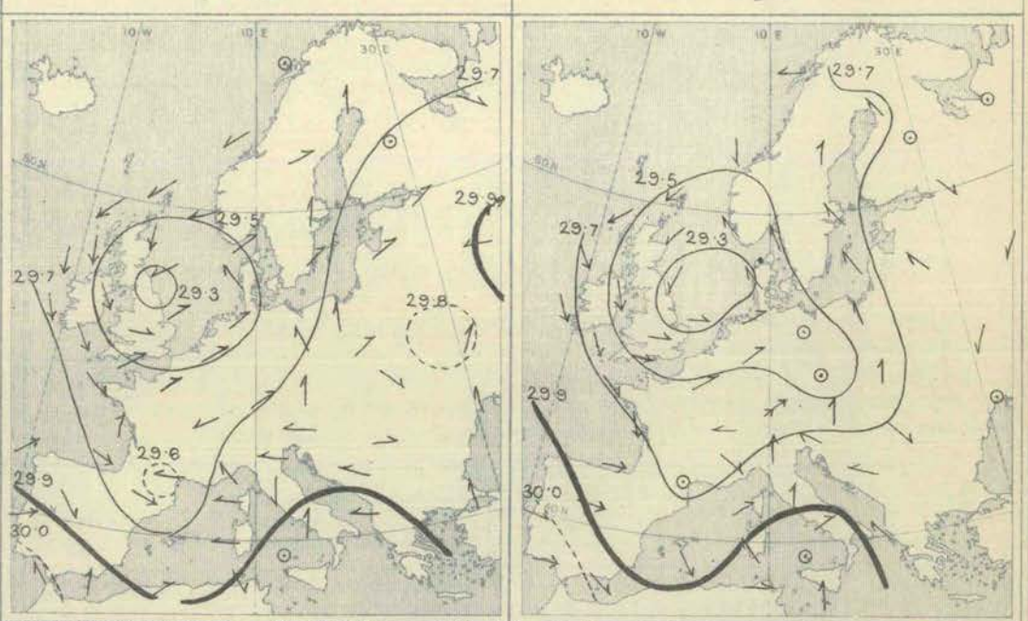
Temperature and Weather. 8 a.m.



Weather dull and rainy in most of the northern and eastern parts of our Islands, but fine at some of our south-western and extreme southern stations. Fine in the north-west of Norway, as well as in Poland, southern Italy, and Algeria, cloudy in most other parts of the Continent, with fog at Vienna and Münster, rain at Kuopio and in the south of Russia. Rain falling later over the greater part of western Europe and at Kharkov—heavily in the east of Scotland, as well as in the south-west and south of France. Thunderstorms occurring in the latter regions and in some parts of eastern and central England.

Temperature fallen again in our Islands and France, risen elsewhere. Morning readings highest, 83° at Algiers, 82° at Tunis, 81° at Brindisi, and 78° at Barcelona, above 70° at most of the Mediterranean and Adriatic stations. Lowest, 48° at Aberdeen, 49° at Ulleaborg, Ardrossan, and Donaghadee, and 50° at Kuopio, Haparanda, Bodö, Sumburgh Head, Wick, Nairn, and Leith. Daily maxima below 60° on most parts of our western and northern coasts, and below 55° in the east of Scotland; exceeding 65° at one or two of our extreme southern stations, exceeding 70° in many parts of France and Germany, and 85° in many parts of Italy.

Barometer and Wind. 8 a.m. 6 p.m.



Wind light from the North-Eastward in the west of Norway, and moderate to strong from the same quarter in Scotland. Moderate or fresh from the North-Westward in the west and south-west of our Islands and the west of France, and from the Westward over the eastern parts of the Channel, South-Westerly over the Netherlands and the east of England. Southerly in Denmark, Sweden, and Finland, variable in Italy and Austria, Westerly or South-Westerly at most of the Spanish stations. No important change occurring over western Europe during day, but backing to South-East over the Baltic.

Barometer highest, 30·0 ins. and upwards in an anticyclone lying off the south of Spain; 29·9 ins. and upwards over central Russia. Lowest, 29·3 ins. and less in a well-marked depression lying over the north of England and the adjacent parts of the North Sea; 29·6 ins. and less in a small shallow system near Perpignan. Depression over north of England subsequently moving away slowly in an easterly direction; barometer rising in most parts of our Islands and France.

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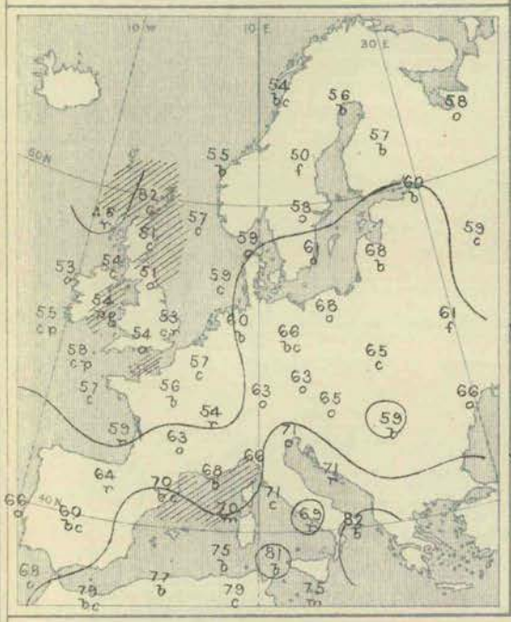
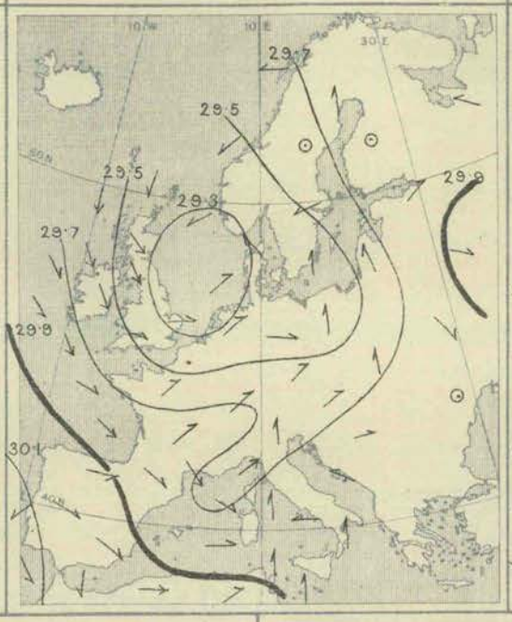
Saturday, 24th June.

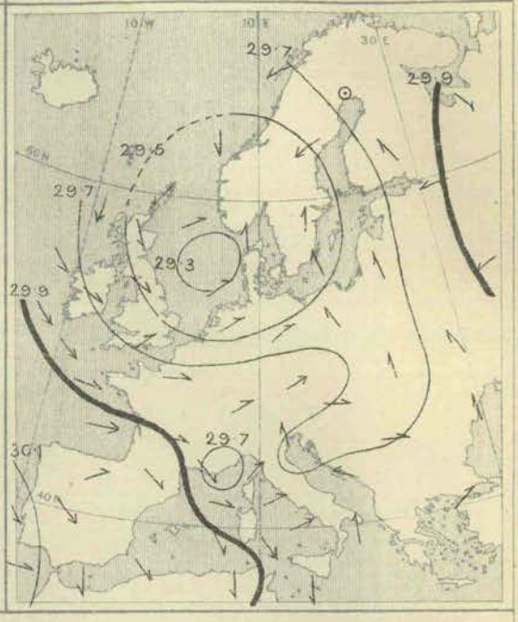
Temperature and Weather. — 8 a.m.



Barometer and Wind. — 8 a.m.



Barometer and Wind. — 6 p.m.



Weather in morning fine and bright over Finland and northern Europe, and, locally, in some parts of western and southern Europe also, but changeable and unsettled as a whole, with rain in many localities, and fog in the south of Russia, as well as at Hernösand. Rain later over nearly the whole of western and north-western Europe, but amounts small except at some of the Scandinavian stations, where they exceeded an inch; thunderstorms in the north-west of Germany.

Temperature in morning highest, 82° at Brindisi, 81° at Palermo, and above 70° at most of the Mediterranean stations; exceeding 60° over south-eastern and central Europe, and also at one or two northern stations. Lowest, 48° at Stornoway, 51° at Nairn, Aberdeen, and Shields, and below 55° over the greater part of the British Islands. Rising later to between 85° and 90° over the southern parts of Italy to between 70° and 80° in many parts of France, but remaining below 65° over the United Kingdom as a whole, and just touching 55° in the north and east of Scotland.

Wind Northerly to North-Westerly, fresh to strong over the United Kingdom, Westerly and South-Westerly over Germany, Southerly over the Baltic, calm over northern Europe, North-Westerly over the western half of the Mediterranean, South-Westerly and Southerly in the east. Becoming more Westerly over England and France later, a South-Easterly breeze setting in over Finland, and a strong North-Westerly breeze at Cagliari and Palermo.

Barometer highest, (1) 30·1 ins. and more to 29·8 ins. over the Iberian Peninsula, the west of France, the Bay of Biscay, and adjacent parts of the Atlantic; (2) 29·9 ins. and more to 29·8 ins. over Russia. Lowest, 29·3 ins. and less in a depression over the North Sea, and below 29·7 ins. over the Gulf of Genoa. The North Sea depression moving north-eastwards later, and barometer rising over western Europe.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are show by arrows, which are drawn flying *with the wind*, the force is indicated thus: ⇉ = a heavy gale; → = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breese: and ⊙ = a calm. In the left-hand Chart the weather is indicatod as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Germany, Sweden, and Norway, and 7 a.m. in France, Algeria, Italy, Austria, and Russia; that for 6 p.m. is prepared from observations made at 6 p.m. in the British Islands and France, 7 p.m. in Algeria, 8 p.m. in Sweden and Norway, Germany, and Austria, and 9 p.m. in Russia, Belgium, and Italy. The time indicated in each case is the standard time for each country.

GENERAL NOTES.

In the course of the past week there has been a complete breaking up of the long period of dry weather which had prevailed for several months over western Europe. The change commenced first over Russia, Austria, and south-eastern Europe, but during Monday and Tuesday temperature gave way rapidly over the British Islands, Germany, and the north of France, and in the southern parts of the latter country rain became prevalent. Early on Thursday a well-defined depression appeared over Scotland, and, while heavy rain set in over that country accompanied by Northerly and North-Easterly winds, considerable quantities were reported in the north and east of England also, but our south-western coasts escaped. Towards the end of the week a warm South-Easterly current of wind was setting in over Russia and northern Europe, while cool Northerly and North-Westerly winds were observed over the British Islands, and Westerly breezes in France, but the weather was unsettled generally and showers prevalent in most places

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 146.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	STATIONS	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	28·2	?	23	?	EASTBOURNE	53·1	?	47	?
OSWALDKIRK (Yorkshire)	30·6	?	26	?	TENBY	58·0*	?	50*	?
WORKSOP	30·7	−4·7	26	− 4	NEWQUAY	94·3	?	83	?
THURCASTON (Leicestershire)	44·7	+8·4	38	+ 6	TORQUAY	71·3*	?	63*	?
MARGATE	38·7	?	34	?	ARLEY COTTAGE (County Cavan)	47·6	?	40	?
WESTBOURNE (Sussex)	57·7 *	?	51*	?	GUERNSEY	87·8*	?	78*	?
BRIGHTON	53·9	?	47	?					

* The values at Westbourne, Tenby, Torquay and Guernsey are obtained by Jordan's Photographic Recorder.

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WEEKLY WEATHER REPORT.

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VOL. X. No. 26.] *Third Series.* WEEK ENDING SATURDAY, 1ST JULY, 1893. [*Price 6d.* [*Annual Subscription, post paid, £1 10s. 0d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871-90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the twenty-five years 1866-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90 only BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the ten years 1881-90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

	DISTRICTS. (See p. 146.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 1st, 1893. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	78	40	62·2	48·1	54·7	1 above.	89*	+19	0	− 1	1004	+351	485	− 57
	1. SCOTLAND, EAST	77	41	64·6	48·7	56·1	0 (average)	99	+ 7	0	0	1137	+255	548	− 21
	2. ENGLAND, N.E.	77	44	66·3	52·0	58·6	2 above.	116	+17	0	0	1172	+285	436	− 62
	3. ENGLAND, EAST	81	42	70·6	50·6	59·9	1 above.	125	+12	0	0	1424	+341	524	− 37
	4. MIDLAND COUNTIES	86	40	71·8	50·2	60·3	2 above.	128	+17	0	0	1555	+448	505	− 47
	5. ENGLAND, SOUTH	84	41	68·8	53·5	60·6	1 above.	130	+11	0	0	1579	+386	373	− 43
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	77	35	65·0	49·4	56·7	0 (average)	103	+ 9	0	0	1264	+351	354	− 63
	7. ENGLAND, N.W.	79	43	67·3	52·3	59·3	2 above.	121	+19	0	0	1414	+445	323	− 91
	8. ENGLAND, S.W.	84	41	68·0	52·7	59·8	1 above.	125	+15	0	0	1621	+494	246	− 70
	9. IRELAND, NORTH	79	39	66·7	50·9	58·2	2 above.	113	+17	0	0	1408	+391	258	−104
	10. IRELAND, SOUTH	74	43	66·1	52·1	58·6	1 above.	116	+10	0	0	1611	+423	178	−100
	—CHANNEL ISLANDS	85	49	68·7	56·4	62·1	3 above.	141	+27	0	0	1821	+573	70	− 52

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 146.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the mean for the Week.	From Jan. 1st, 1893. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 1st, 1893. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of ins.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	3	4	3 less.	106	−12	18·5	− 3·8	31	− 2	25	− 1	614	− 50	26	− 3
	1. SCOTLAND, EAST	4	7	1 more.	87	− 7	11·0	− 2·9	41	− 6	34	− 6	768	+ 14	33	0
	2. ENGLAND, N.E.	3	4	1 less.	72	−16	8·0	− 3·3	43	+ 8	36	+ 8	852	+184	37	+ 8
	3. ENGLAND, EAST	2	3	3 less.	71	−15	7·4	− 3·8	53	+ 8	46	+ 8	1022	+218	45	+ 10
	4. MIDLAND COUNTIES	3	4	2 less.	71	−14	7·9	− 4·9	53	+ 12	45	+11	959	+249	42	+ 11
	5. ENGLAND, SOUTH	4	4	1 less.	68	−15	7·8	− 4·5	49	+ 4	43	+ 3	1047	+284	46	+ 13
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	4	5	3 less.	87	−14	15·2	− 7·5	45	+ 3	38	+ 2	856	+124	37	+ 5
	7. ENGLAND, N.W.	4	9	3 more.	76	−16	10·6	− 3·8	44	+ 4	38	+ 4	858	+136	37	+ 6
	8. ENGLAND, S.W.	3	6	0 (average)	70	−24	11·7	− 6·0	54	+ 6	48	+ 5	1132	+284	49	+ 12
	9. IRELAND, NORTH	4	10	3 more.	92	−15	12·6	− 3·4	47	+ 11	40	+11	715	+ 14	31	0
	10. IRELAND, SOUTH	4	10	4 more.	80	−20	13·3	− 4·9	41	+ 1	35	+ 1	822	+ 24	36	+ 1
	—CHANNEL ISLANDS	3	5	0 (average)	73	−29	9·4	− 5·2	60	+ 7	53	+ 5	1296	+318	57	+ 14

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather continued unsettled and showery in all districts during the earlier part of the period, with thunder and lightning in several localities. Subsequently, however, the conditions became fine and dry again in all districts, and continued so for the remainder of the week.

Temperature just equalled the mean in Scotland E. and W., but was slightly above it in all other districts. The highest of the maxima, which occurred at most stations on July 1st, varied from 86° in the Midland Counties, 85° in the Channel Islands, and 84° in England S. and S.W., to 74° in Ireland S. The lowest of the minima were recorded, as a rule, during the earlier days of the period, and ranged from 35° in Scotland W., and 39° in Ireland N., to 44° in England N.E., and to 49° in the Channel Islands.

Rainfall was rather more than the mean in Scotland E., England N.W., and over Ireland, and just equal to it in England S.W. and the Channel Islands; in all other districts, however, there was again a deficit. In some parts of Ireland the rain was very heavy locally—thus, on Tuesday at Dungannon the large amount of 3·33 ins. was recorded between 0·30 p.m. and 7 p.m.

Bright Sunshine was rather less than the normal in Scotland, but exceeded it over England and Ireland. The percentage of the possible duration ranged from 53 in the Channel Islands, and from between 43 and 48 in most parts of England, to 25 in Scotland N.

Barometer and Wind.—During the earlier half of the week barometrical pressure was affected by a well-defined and somewhat deep depression which travelled northwards and north-eastwards from the south-west of Ireland to Scotland, and disappeared to the north-eastward of the Shetlands. Fresh or strong Westerly and South-Westerly winds were very general over Ireland and England during the passage of this system, and in the English Channel they attained the force of a slight gale. Towards the end of the week the conditions became anticyclonic, with light Southerly winds in the west and north, and Easterly airs in the south and south-east.

* This value has been altered slightly owing to additional information for a preceding week.

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II.—DATA from which the SUMMARY on page 151 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°				Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	58	45	56·4	48·1	52·0	+ 1·0	70	0	3	0·46	−0·02	*	*	*	*
	Stornoway	67	44	59·4	46·6	52·6	− 0·6	74	0	4	0·11	−0·59	36·8	− 1·3	30	− 1
	Wick	64	47	59·7	49·0	54·0	+ 0·3	84	0	3	0·43	−0·01	*	*	*	*
	Lairg ‡§	75	40	64·2	46·0	54·5	+ 0·1	88	0	4	0·28	−0·31	*	*	*	*
	Glencarron ‡§	78	44	64·5	47·6	55·5	+ 2·0	95	0	5	0·69	−0·59	*	*	*	*
	Fort Augustus ‡§	78	46	67·2	49·4	57·7	+ 2·2	110	0	2	0·03	+0·03	25·5	?	21	?
	Fort William ‡§	75	47	64·0	50·3	56·7	+ 0·7	103	0	3	0·41	−0·62	31·3	?	25	?
1. SCOTLAND, E.	Nairn	77	43	65·6	46·7	55·5	− 0·9	95	0	2	0·56	+0·11	*	*	*	*
	Aberdeen	68	47	61·3	50·4	55·5	− 0·2	95	0	3	0·37	−0·11	35·5	− 7·1	29	− 6
	Braemar ‡§	70	41	62·0	46·8	53·9	+ 0·3	83	0	4	0·47	−0·13	36·8†	?†	30†	?†
	Ochtertyre ‡§	75	44	67·1	50·0	58·0	+ 1·9	112	0	4	1·80	+1·12	*	*	*	*
	Leith	69	45	65·7	50·6	57·6	+ 0·4	109	0	4	0·28	−0·24	*	*	*	*
	Marchmont ‡§	76	42	66·1	47·4	56·1	+ 0·6	99	0	4	0·72	+0·04	50·5	?	42	?
2. ENGLAND, N.E.	Alnwick Castle	69	50	62·9	53·9	58·1	+ 2·6	113	0	3	0·36	−0·18	*	*	*	*
	Durham	77	44	69·4	50·6	59·4	+ 2·1	122	0	4	0·34	−0·18	45·6	+ 9·4	38	+ 7
	Shields	71	46	64·7	49·3	56·5	− 0·1	102	0	4	0·47	+0·01	*	*	*	*
	Scarborough ‡§	72	48	66·1	52·9	59·0	+ 1·5	119	0	4	0·42	−0·08	*	*	*	*
	York	75	47	69·1	51·9	59·9	+ 1·4	125	0	3	0·59	+0·07	47·2	+ 9·2	40	+ 9
	Spurn Head	73	50	65·3	53·3	58·9	+ 1·4	118	0	2	0·36	+0·01	*	*	*	*
3. ENGLAND, E.	Hillington ‡§	78	42	71·6	50·1	60·1	+ 1·2	127	0	2	0·35	−0·22	52·4	+ 9·7	45	+ 6
	Yarmouth	74	47	66·4	53·0	59·2	+ 0·7	120	0	3	0·31	−0·20	*	*	*	*
	Geldeston	77	45	68·8	50·3	58·9	+ 0·1	118	0	2	0·22	−0·23	55·2	+ 8·3	48	+ 6
	Cambridge	81	44	74·7	50·1	61·5	+ 1·6	137	0	2	0·12	−0·42	57·7	+14·9	50	+12
	Rothamsted	79	43	71·5	49·5	59·7	+ 0·8	124	0	3	0·31	−0·28	46·3	?	40	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	79	41	73·0	48·1	59·7	+ 0·5	124	0	2	0·59	+0·01	*	*	*	*
	Loughborough	83	41	73·7	50·7	61·4	+ 1·0	136	0	3	0·35	−0·17	*	*	*	*
	Stamford (Ketton Hall)	82	43	74·1	50·3	61·4	+ 1·5	136	0	3	0·30	−0·22	*	*	*	*
	Cheadle ‡§	73	43	67·5	50·3	58·3	+ 1·7	114	0	3	0·73	+0·05	*	*	*	*
	Churchstoke ‡§	79	40	68·8	48·5	57·9	+ 1·1	111	0	3	0·58	+0·04	50·2	+10·1	43	+ 8
	Hereford ‡§	86	43	73·2	50·5	61·1	+ 1·7	134	0	2	0·28	−0·22	*	*	*	*
	Cirencester	81	45	71·7	51·9	61·1	+ 3·3	134	0	3	0·15	−0·43	52·0	+10·7	45	+ 8
	Oxford	82	45	72·1	51·6	61·1	+ 1·7	134	0	3	0·07	−0·46	49·7	+ 7·3	43	+ 6
5. ENGLAND, S.	London	79	46	72·0	52·6	61·6	+ 0·3	137	0	4	0·36	−0·16	43·8†	+ 5·5†	38†	+ 3†
	North Foreland	72	48	66·9	53·7	59·8	+ 1·1	125	0	0	—	?	*	*	*	*
	Strathfield Turgiss ‡§	84	41	72·7	49·8	60·5	+ 0·5	130	0	5	0·28	−0·21	*	*	*	*
	Dungeness	68	49	65·9	55·6	60·4	+ 0·8	129	0	3	0·10	−0·28	*	*	*	*
	Hastings (St. Leonards)	77	47	66·1	54·0	59·6	0·0	123	0	4	0·44	+0·04	53·6	+ 4·6	46	+ 3
	Southampton	78	48	70·0	53·8	61·3	+ 1·1	135	0	3	0·52	+0·09	48·7	+ 2·6	43	+ 1
	Hurst Castle	77	54	67·3	56·4	61·5	+ 1·8	137	0	3	0·61	+0·12	*	*	*	*
	Stowell ‡§	81	43	69·6	52·1	60·2	+ 1·1	127	0	6	0·50	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	77	43	64·8	49·2	56·5	+ 0·4	102	0	4	0·30	−0·91	*	*	*	*
	Glasgow	75	44	66·4	50·4	57·8	+ 1·3	111	0	3	0·68	−0·02	38·0	+ 2·7	31	+ 1
	Ardrossan	74	45	64·4	50·3	56·9	0·0	104	0	3	0·43	−0·17	*	*	*	*
	Glenlee ‡§	73	35	65·4	47·8	56·0	+ 0·4	98	0	3	0·59	−0·23	*	*	*	*
	Douglas (Isle of Man)	70	42	63·8	49·3	56·1	− 0·1	99	0	5	0·59	+0·01	52·1	+ 3·8	44	+ 2
7. ENGLAND, N.W.	Newton Reigny	71	43	63·3	49·6	56·0	− 0·1	98	0	3	0·85	+0·27	46·3	+ 4·3	39	+ 6
	Stonyhurst	76	47	66·7	51·4	58·5	+ 1·1	116	0	6	1·37	+0·49	36·0	− 4·3	31	− 4
	Blackpool ‡§	77	53	67·7	54·4	60·6	+ 2·0	130	0	4	0·73	+0·19	44·3	+ 2·6	38	+ 3
	Manchester	78	45	69·4	50·0	59·0	+ 1·4	119	0	4	0.99	+0·24	39·4†	?	34†	?
	Liverpool Obsy. (Bidston)	79	50	70·1	54·7	61·9	+ 3·1	139	0	2	0·60	+0·07	*	*	*	*
	Llandudno ‡§	77	49	66·9	53·3	59·6	+ 0·9	123	0	3	0·93	+0·46	53·8	+14·6	46	+12
	Holyhead	73	50	66·7	53·0	59·4	+ 1·8	122	0	4	0·71	+0·23	*	*	*	*
8. ENGLAND, S.W.	Llandovery	83	41	71·6	49·6	59·8	+ 1·1	125	0	3	1·36	+0·61	*	*	*	*
	Pembroke	67	52	62·9	54·7	58·2	+ 1·1	113	0	3	0·56	+0·08	52·3	+ 1·1	45	0
	Bristol (Montpelier)	84	46	72·8	53·1	62·3	+ 2·6	142	0	4	0·15	?	*	*	*	*
	Arlington (N. Devon)	80	43	68·4	50·7	58·9	+ 1·9	118	0	3	0·48	−0·42	*	*	*	*
	Cullompton ‡§	79	41	71·3	51·2	60·6	+ 1·8	130	0	3	0·48	−0·12	53·4	+10·6	47	+ 9
	Falmouth	72	49	66·4	54·8	60·2	+ 0·7	127	0	4	0·88	−0·24	60·5	+ 9·0	54	+ 9
	Plymouth	77	47	66·9	54·0	60·0	− 0·5	126	0	4	0·67	+0·15	5·5	+ 5·0	45	+ 4
	Prawle Point	71	49	63·6	53·3	58·1	+ 0·6	113	0	3	0·54	+0·12	*	*	*	*
9. IRELAND, N.	Malin Head	74	48	65·1	51·3	57·7	+ 1·7	110	0	4	0·92	?	*	*	*	*
	Londonderry	79	42	70·3	49·8	59·3	+ 1·8	121	0	4	0·78	+0·13	*	*	*	*
	Edenfel (Omagh)	76	48	67·6	52·3	59·4	+ 3·0	122	0	5	1·06	+0·40	*	*	*	
	Belmullet	70	47	64·9	52·6	58·3	+ 1·9	114	0	5	0·53	?	*	*	*	*
	Markree Castle	70	39	65·5	48·2	? 56·3	? + 0·6	?100	0	4	1·01	+0·22	44·3	+11·3	38	+10
	Brookeborough	74	43	67·2	51·1	58·6	+ 2·7	116	0	3	1·33	+0·63	*	*	*	*
	Armagh	74	44	67·2	49·3	57·6	+ 0·7	109	0	3	0·88	+0·31	50·3	+13·8	43	+12
	Donaghadee	70	54	65·3	55·3	60·0	+ 3·5	126	0	6	1·37	+0·87	*	*	*	*
	Edgeworthstown	74	42	66·9	47·9	56·7	0·0	103	0	5	1·59	+0·86	*	*	*	*
10. IRELAND, S.	Dub in	73	50	67·4	53·1	59·8	+ 0·7	125	0	5	0·87	+0·42	52·4	+13·0	45	+12
	Parsonstown	74	46	67·3	51·1	58·6	+ 1·4	116	0	4	0·71	+0·11	33·5	− 4·2	29	− 4
	Kilkenny	72	43	65·9	49·7	57·2	− 0·4	106	0	3	1·07	+0·55	*	*	*	*
	Waterford	72	44	66·9	49·8	57·8	− 0·7	111	0	3	1·37	+0·77	*	*	*	*
	Roche's Point	66	50	63·9	53·4	58·3	− 0·6	114	0	4	1·38	+0·66	*	*	*	*
	Valencia	67	50	64·6	53·7	58·7	+ 1·0	117	0	4	1·07	+0·25	36·5	− 5·1	32	− 4
	Killarney	71	47	65·5	52·4	58·5	+ 1·3	116	0	4	0·91	?	*	*	*	*
	Foynes	71	48	67·1	53·2	59·7	+ 2·0	124	0	4	0·85	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	70	54	66·4	55·7	60·7	+ 2·1	131	0	2	0·44	−0·04	*	*	*	*
	Jersey	85	49	70·9	57·0	63·5	+ 3·3	151	0	3	0·55	+0·06				

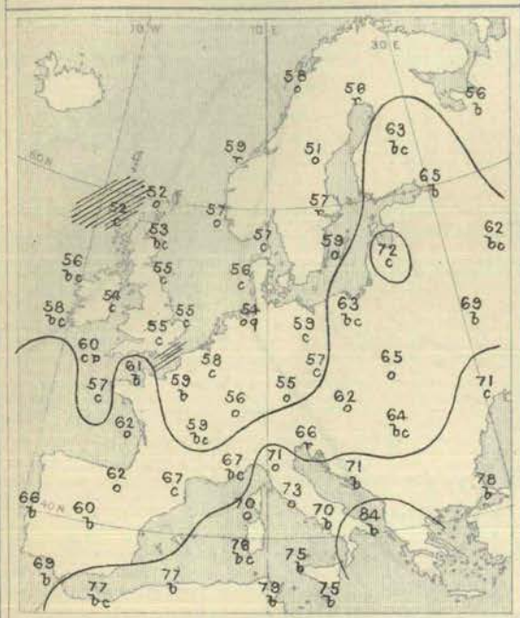
Stations marked ‡ are in connection with the Royal Meteorological Society, and those marked § with the Scottish Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

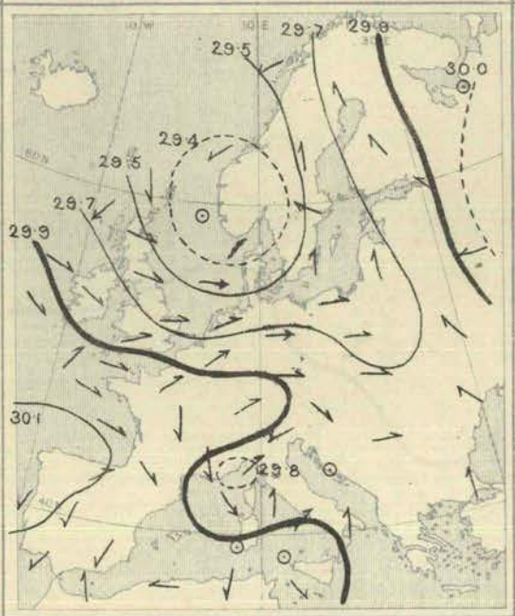
† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row) at the Kew Observatory, and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

Sunday, 25th June.

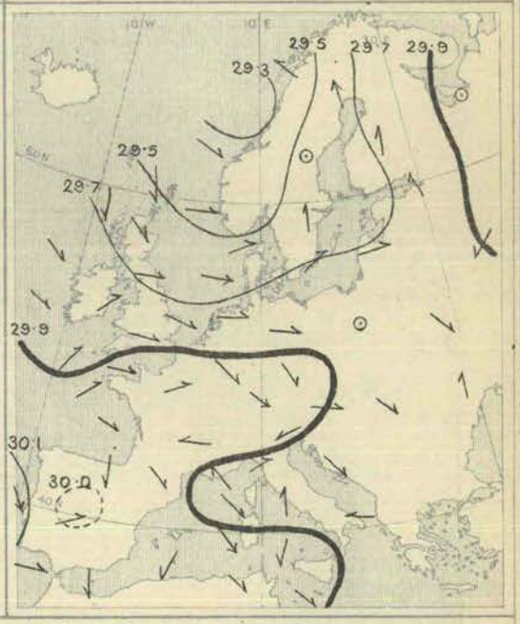
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine (but not settled) over the greater part of western and southern Europe, as well as over central and northern Russia; cloudy, changeable, and unsettled over Scandinavia, Scotland, the North Sea, and central Europe, with rain at several of the northern and north-western stations, as well as at Trieste. Some rain later in several parts of France, the British Islands, Denmark, and Scandinavia, a heavy fall at Haparanda; weather rather squally in the English Channel. Thunderstorms occurring in many parts of Germany and also at Vienna.

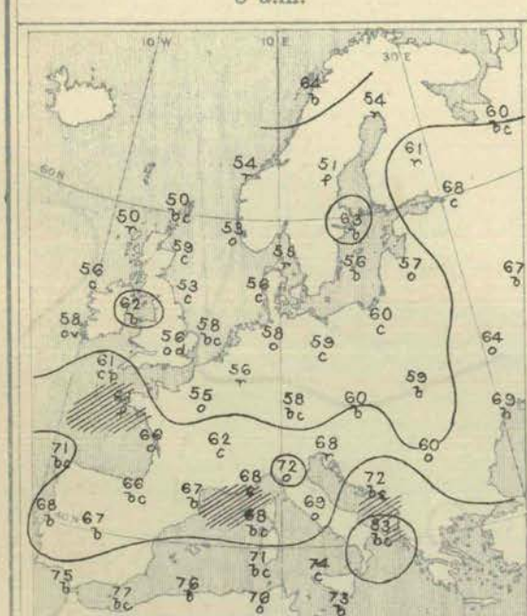
Temperature fallen decidedly over central Europe, risen slightly in the north-west. Morning readings highest, 84° at Brindisi, 79° at Tunis, but below 70° except in extreme south and south-east, exceeding 60° over central Russia and Finland, but below 60° over the British Islands and central Europe. Lowest, 52° at Sumburgh Head, Stornoway, and Nairn, 53° at Aberdeen and Malin Head, 54° at Spurn Head and Liverpool. Not exceeding 66° at any of our own stations later, but rising to between 70° and 78° in the south-west and south of France, to 80° or more over the greater part of Spain and Italy, and to 90° at Brindisi.

Wind strong Northerly in the north of Scotland, moderate to fresh, Westerly over England, the Channel, and North Sea, Westerly to South-Westerly over north Germany, light South-Easterly over Finland, and Southerly over the Gulf of Bothnia. Small cyclonic circulation of fresh winds over the Gulf of Genoa and north of Italy. No decided change later.

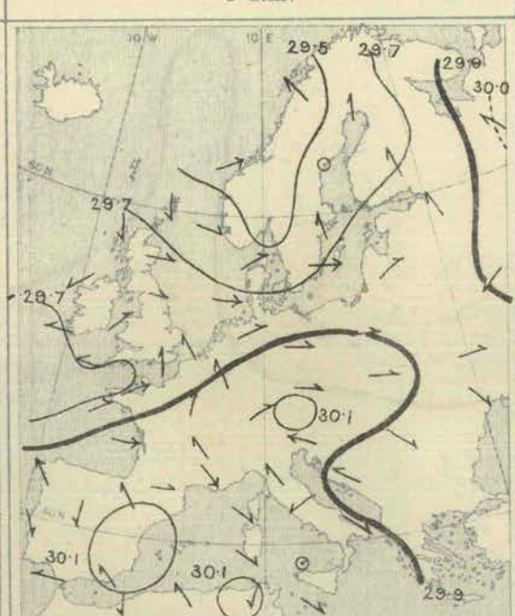
Barometer highest, (1) 30·1 ins. and more over the Iberian Peninsula, and exceeding 30·0 ins. over the Bay of Biscay and south-west of France; (2) 30·0 ins. and more over central and northern Russia. Lowest, 29·4 ins. and less in a depression lying over the southern parts of Norway, and north-eastern parts of the North Sea; and 29·8 ins. and less over the Gulf of Genoa. Falling on our south-western coasts later, rising elsewhere. New small depression approaching mouth of Channel from Atlantic. Disturbance over Norway moving steadily northwards

Monday, 26th June

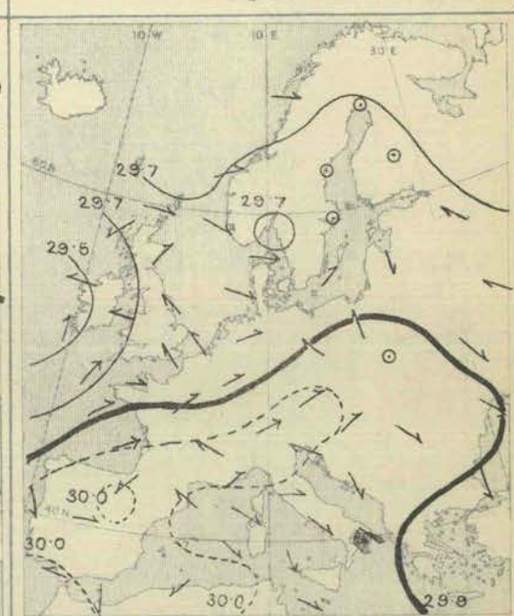
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather cloudy and showery over the Channel and south of England, but fair or fine in most other parts of the United Kingdom, and also over a considerable portion of the Continent. Foggy over the Gulf of Finland, rainy in many parts of Finland and Scandinavia; dull over the northern parts of Italy and the Adriatic, with rain at Trieste. Rain setting in later in the west of our Islands, and spreading quickly eastwards, amounts large at several western stations. Rain falling also in many parts of Russia—heavily at St. Petersburg.

Temperature risen in most parts of western and north-western Europe, but fallen in many of the eastern, central, and southern regions. Morning readings highest, 83° at Brindisi, 77° at Oran, and 76° at Algiers and La Calle; above 70° in many parts of southern Europe, above 65° over Russia, and as high as 64° at Bodö. Lowest, (1) 50° at Sumburgh Head and Stornoway, and 53° at Wick; (2) 51° at Hernösand and Hango, and 52° at Helsingfors; (3) 53° at Wiesbaden, and 54° at Breslau; (4) 54° at Prawle Point. Rising during day to a little above 70° at some of the English stations, 80° and upwards in many parts of southern Europe, the highest readings of all being 93° at Cape Béarn, and 91° at San Fernando.

Wind fresh from West or South-West in the west of France, light from South or South-East over the eastern parts of England and France; light to moderate from the Eastward on our south and south-west coasts. Light Westerly to Northerly in Scotland, moderate to strong from the Westward over Denmark, Germany, and the southern parts of Scandinavia; light from South or South-East over the northern parts of Russia and Scandinavia. Variable over Spain, Italy, and Algeria. Subsequently shifting to the Southward on our south-west coasts, and to the South-Eastward in the north and north-east of our Islands.

Barometer highest, 30·0 ins. to 30·1 ins. or more in an anticyclone lying over Spain, Algeria, the western parts of the Mediterranean, and the southern parts of France and Germany, as well as in another system over the north of Russia. Lowest, 29·5 ins. and less in a large depression over Norway, 29·7 ins. and less in a complex system lying off our south-west coasts, 29·8 ins. and less over the Black Sea and the southern parts of Russia. Depression in south-west subsequently breaking up, but new and deeper disturbance advancing over Ireland from the Atlantic.

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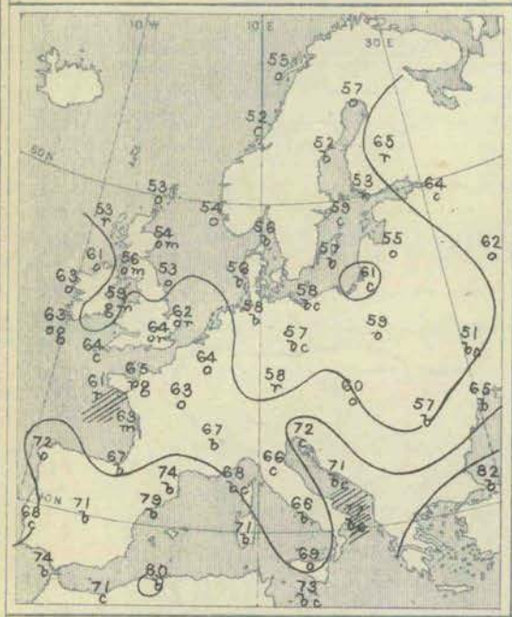
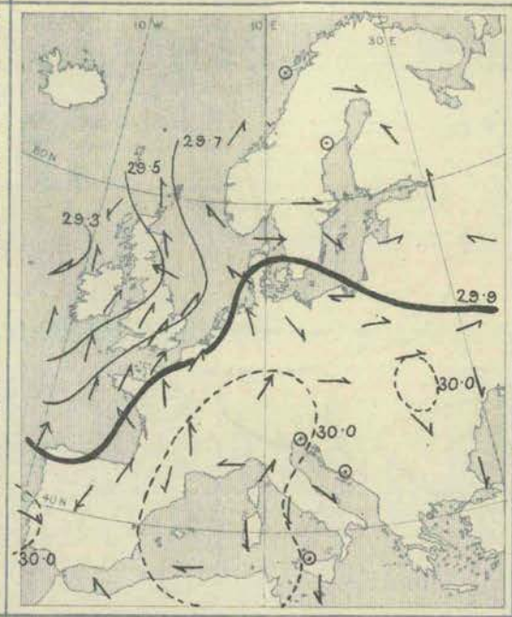
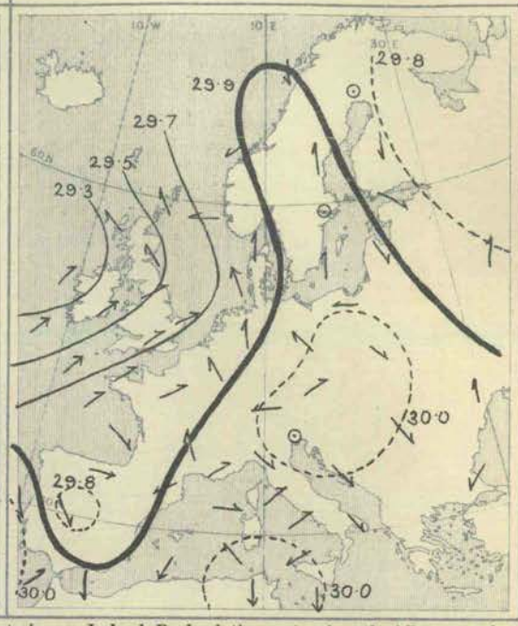
Tuesday, 27th June.

Temperature and Weather.	Barometer and Wind.	
8 a.m.	8 a.m.	6 p.m.







Weather dull over our Islands and their immediate neighbourhood with rain in many places; dull also in many parts of Russia, Austria, and south Germany, and rainy at Kuopio and Munich. Fine and bright at several of the Danish and Scandinavian stations, as well as over southern Europe generally. Rain falling during day in nearly all parts of north-western Europe and also in Russia: thunder and lightning occurring over France and the south of England, and thunder heard at Malin Head.

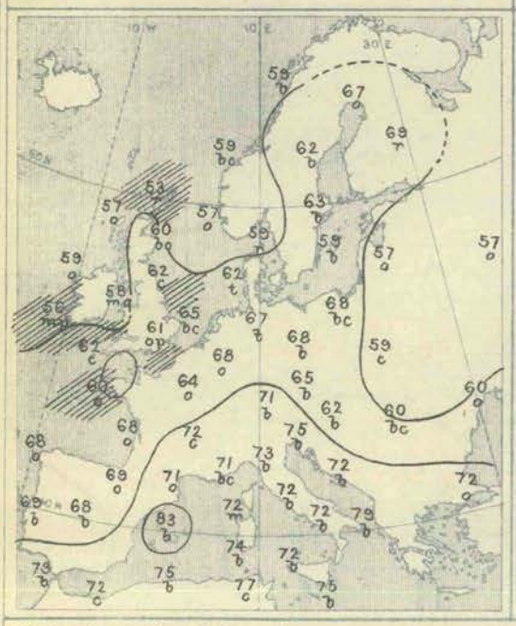
Temperature fallen in Russia and Italy, but risen in nearly all other countries. Morning readings highest, 82° at Constantinople, 80° at Algiers, 79° at Barcelona, 78° at Palma and Sfax, and 77° at Brindisi, above 70° in many of the southern countries, and ranging between 60° and 65° over the greater part of Ireland and England. Lowest, 52° at Hernösand, Christiansund, and Wick, and 53° at Hangö, Sumburgh Head, Stornoway, and Shields. Rising during day to between 70° and 75° in many parts of Ireland and England, and reaching 77° at Loughborough and 80° at Cambridge. Exceeding 80° in most parts of southern Europe, and reaching 90° in several places, the highest reading of all, 95° at Bordeaux and Cape Béarn.

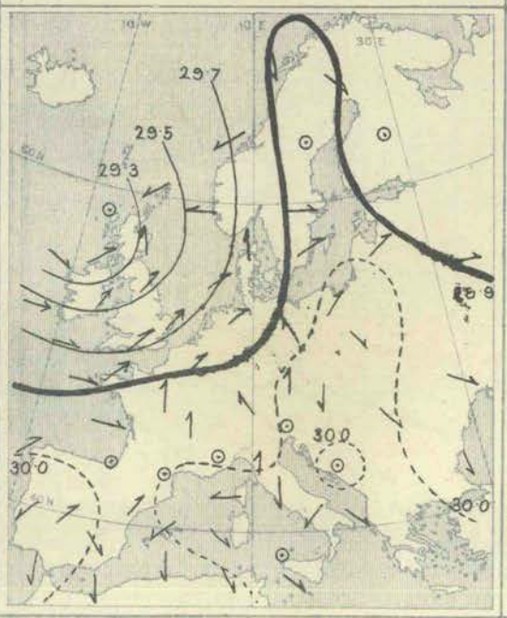
Wind Southerly or South-Westerly over Ireland, England, the west and north of France, and the north of Spain, and strong in force over the eastern parts of the English Channel. Light or moderate from the South-Eastward or Eastward over Scotland and the eastern shores of the North Sea. Westerly or North-Westerly over the Baltic and the south of Sweden, variable in Russia, Germany, and Austria, North-Westerly in Italy, North-Easterly over the central and southern parts of Spain. Subsequently increasing to a moderate gale from the South-Eastward in Caithness, veering to the Westward in the west of France; no important change occurring elsewhere.

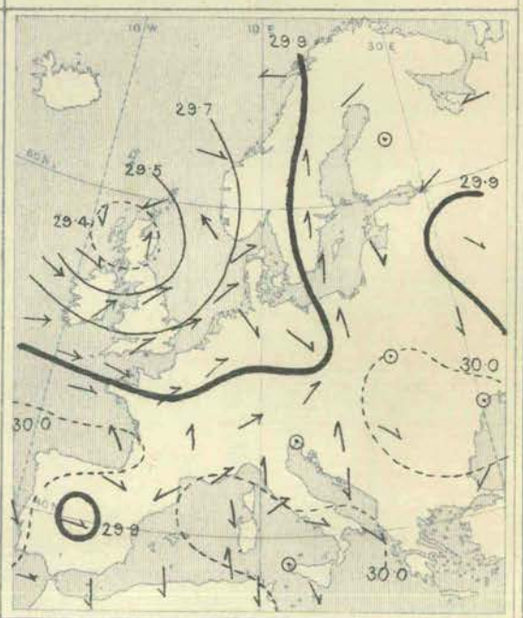
Barometer highest, 30·0 ins. and upwards in a large anticyclone extending from Algeria to northern Italy, Switzerland, and the southern parts of France and Germany, as well as in smaller systems lying respectively over eastern Austria and over the south-west of Spain. Lowest, 29·3 ins. and less in a depression lying off the north-west of Ireland; 29·8 ins. and less in a large shallow area over northern Russia. Depression in north-west spreading eastwards during day, and barometer falling in all parts of western Europe.

Wednesday, 28th June.

Temperature and Weather.	Barometer and Wind.	
8 a.m.	8 a.m.	6 p.m.







Weather changeable and showery in many parts of north-western Europe, with thunder at Fanö and Cuxhaven. Fine and bright in the more central and southern countries, but dull in Russia with rain at Kuopio. Rain falling during day over the northern parts of the Kingdom generally, and showers at some of our southern stations, thunder heard at Nairn in evening, and thunderstorms occurring in several parts of France and Germany.

Temperature fallen in the western parts of our Islands, but risen in most other localities. Morning readings highest, 83° at Palma, 79° at Brindisi, and 77° at La Calle and Aumale; above 70° in many parts of southern Europe, and above 35° in Belgium, Germany, central Finland, and the north of Sweden. Lowest, (1) 53° at Sumburgh Head, and 57° at Stornoway, Aberdeen, and Malin Head; (2) 55° at Hangö, and 57° at Helsingfors, Riga, and Moscow. Rising during day to 70° or more over the eastern, central, and south-eastern parts of England, and reaching 76° at Cambridge. Exceeding 80° in most parts of central and southern Europe, the highest reading of all being 91° at Florence.

Wind fresh or strong from the Westward on our extreme south-west coasts, and from the South-Westward in most other parts of Ireland and England, light from the Southward in Scotland; moderate from the Eastward on the Norwegian coast. South-Easterly in Germany, light from the Northward or North-Westward over Russia, Austria, and Italy; variable over Spain, Algeria, and the south of France. Subsequently increasing to a moderate to fresh gale from the South-Westward over the south-eastern parts of England, veering to the North-Westward in the north of Ireland; no important change occurring elsewhere.

Barometer highest, 30·0 ins. and upwards in a large anticyclone extending from the Mediterranean across Italy and Austria to Poland and eastern Germany, as well as in a smaller system lying over Spain. Lowest, 29·3 ins. and less in a well-marked depression over the north-western parts of the United Kingdom; gradients rather steep over Ireland and England. Depression subsequently travelling north-eastwards across Scotland, and beginning to fill up; barometer rising in most parts of western Europe.

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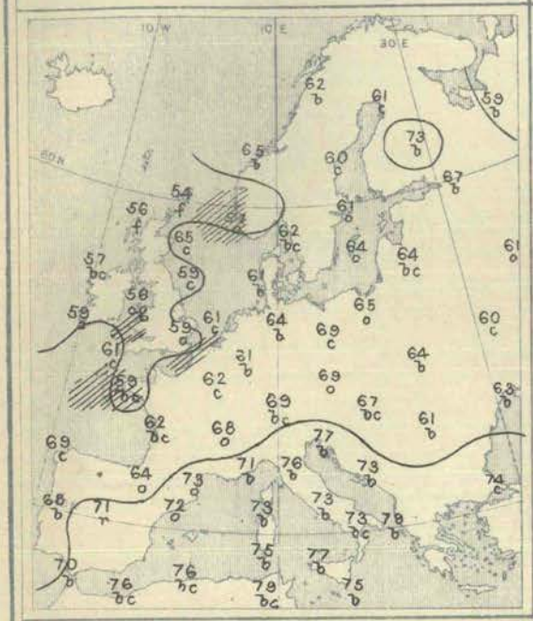
Thursday, 29th June.

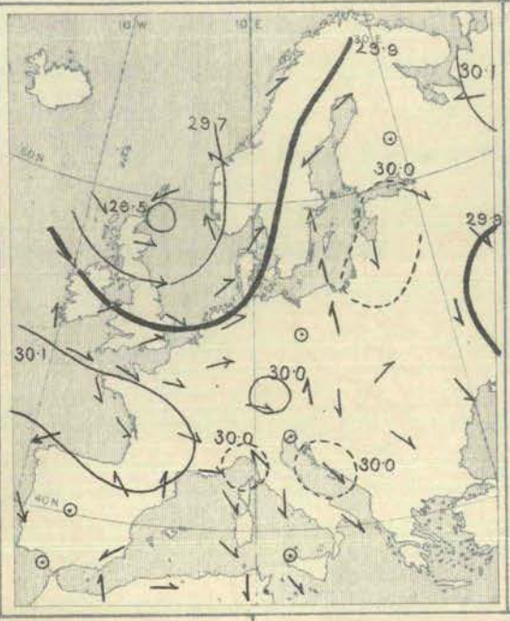
Temperature and Weather.

8 a.m.

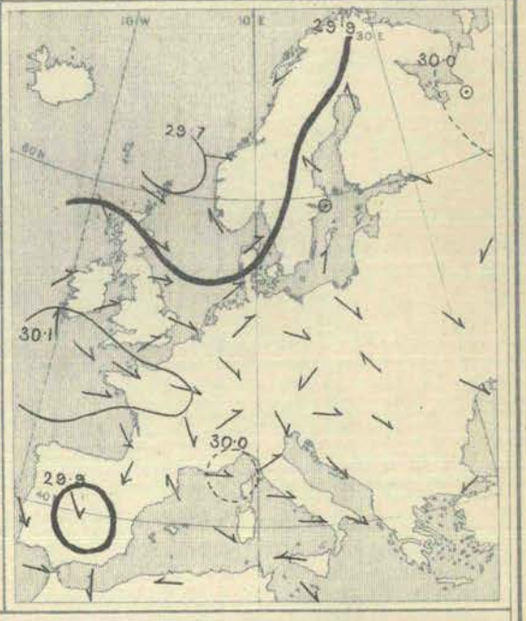


Barometer and Wind.

8 a.m.



6 p.m.



Weather cloudy over the greater part of our Islands, as well as in Sweden, the south of Norway, and the eastern parts of Germany. Fine and bright in nearly all other parts of Europa, but rainy at Madrid. Very slight rain falling during day at one or two of our western stations, but weather remaining fair and dry in all other parts of the Kingdom. Rain experienced at several of the Scandinavian and German stations, and heavy amounts at Cracow and Turin.

Temperature fallen in our Islands, the Netherlands, and France, as well as in Sweden, risen elsewhere. Morning readings highest, 79° at Brindisi, Aumale, and La Calle, and 77° at Toulon, Trieste, Pesaro, Cagliari, and Tunis, above 70° in most parts of southern Europe, and also over central Finland; above 60° at nearly all the Continental stations, as well as in the eastern and south-eastern parts of Great Britain. Lowest, 53° at Malin Head, and 54° at Sumburgh Head. Rising during day to 65° and upwards in most parts of the United Kingdom, and to 70° or 71° in the south-east of England. Exceeding 80° in many parts of central and southern Europe, and reaching 95° at Madrid.

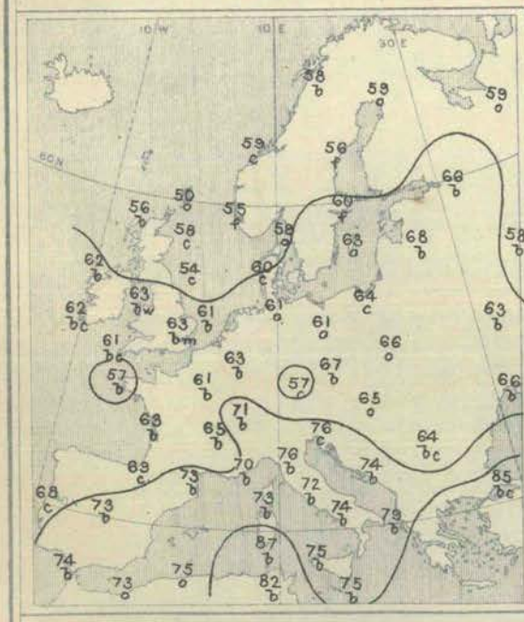
Wind moderate to strong from the Westward or North-Westward in our Islands and France, from the South-Westward over Germany, Denmark, and the Netherlands, and from the South-Eastward in Norway. Light from the Southward in Sweden, variable in the northern parts of Russia and also in Austria. Light from the Northward or North-Westward over Italy and the southern parts of Russia. Chiefly Easterly in Spain, variable in Algeria. Subsequently backing to the South-Westward or Southward in the west of Ireland; no important change occurring elsewhere.

Barometer highest, 30·1 ins. and upwards over the Bay of Biscay and the greater part of France, and also in another system lying over the north of Russia. Lowest, 29·5 ins. and less in a well-marked depression lying off the north-east of Scotland; gradients moderate over our Islands. Depression subsequently travelling away to the north-eastward, barometer rising in nearly all parts of the United Kingdom, but beginning to fall again in the extreme west.

Friday, 30th June.

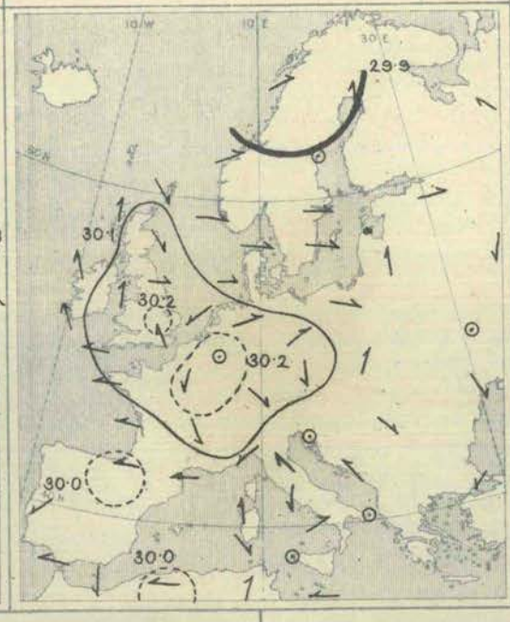
Temperature and Weather.

8 a.m.

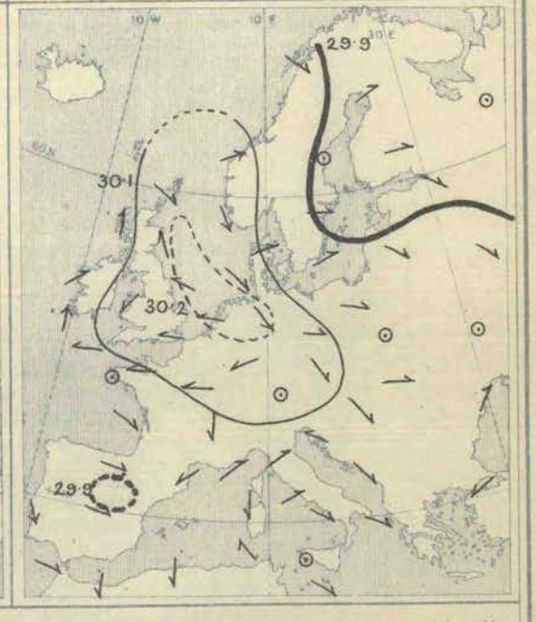


Barometer and Wind.

8 a.m.



6 p.m.



Weather fine and bright over the whole of western and southern Europe, and also over the greater part of Russia. Foggy at several of the Scandinavian stations, and cloudy over the greater part of Denmark, Germany, and Austria, with rain at Memel. Some increase of cloud taking place later in the west of Ireland. Sky clearing in many parts of Germany, but heavy rain falling at Cracow and Lemberg.

Temperature risen in the west and south of our Islands, but fallen in most other localities. Morning readings highest, 91° at Aumale, 87° at Cagliari, 85° at Constantinople, 82° at La Calle; above 70° in most parts of southern Europe, and above 60° in all but the northern parts of our Islands and the Continent. Lowest, 50° at Sumburgh Head, 54° at Shields, and 56° at Hernösand and Stornoway. Rising during day to 75° or more over the central and southern parts of England, and reaching 79° in London and at Cambridge. Exceeding 80° at most of the French stations, and reaching 90° or more in several parts of southern Europe, the highest reading of all being 94° at Madrid.

Wind light or moderate from the Eastward over the Channel and Bay of Biscay, and from the South-Eastward or Southward on the western coasts of our Islands. Light from the North-Westward on our eastern coasts and from the Westward on the eastern shores of the North Sea. Variable over the northern parts of Russia, light from North or North-West over Austria and the southern parts of Russia and Germany. Variable in Italy and Algeria. Subsequently shifting to the Eastward on our eastern coasts and to the Westward in the south-west of France. Veering to the North-Westward on the eastern shores of the North Sea.

Barometer highest, 30·1 ins. to 30·2 ins. in an anticyclone covering the greater part of our Islands, the North Sea, the Netherlands, France, and Germany. Lowest, 29·9 ins. and less in a large shallow depression over the northern parts of Scandinavia. Slight fall taking place during day in France and the west and south of our Islands, and depression beginning to approach our western coasts. Shallow disturbance over Scandinavia moving eastwards.

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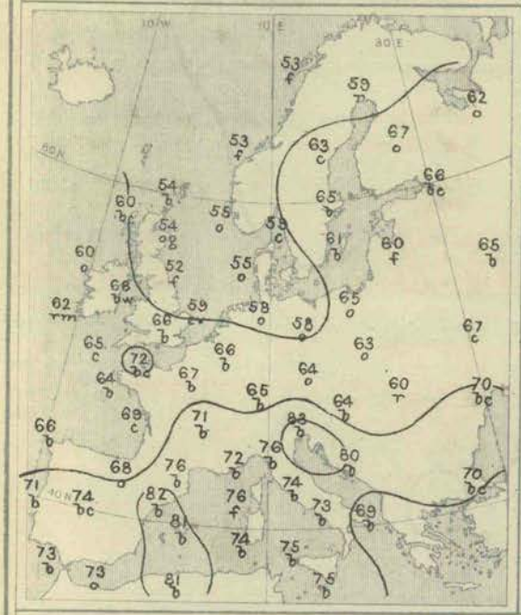
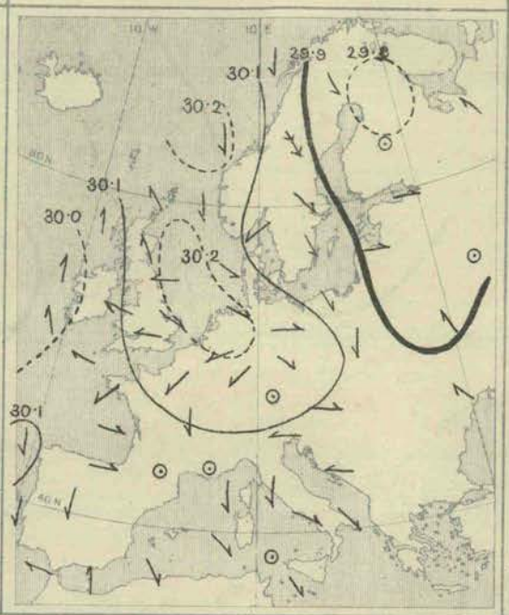
Saturday, 1st July.

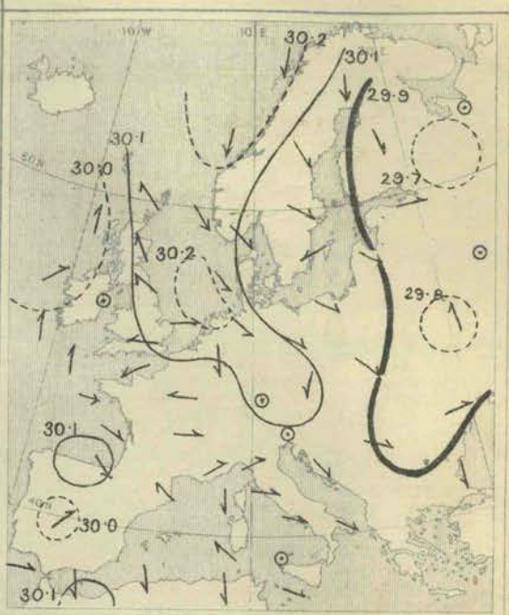
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fine over the greater part of western and southern Europe, but dull in the west of Ireland with rain at Valencia; foggy at the mouth of the Tyne and also in the west of Norway. Dull in many parts of Russia and Germany, with rain at Swinemunde. A little rain falling later at most of the Irish stations, as well as on the north-east coasts of Great Britain; thunderstorms occurring in some parts of France.

Temperature risen in most places. Morning readings highest, 83° at Trieste, 82° at Barcelona, 81° at Aumale, and 80° at Lésina; above 70° in most parts of southern and eastern Europe, and above 65° at several of the English stations. Lowest, 52° at Shields, 53° at Bodö, Christiansund, and Leith, and 54° at Sumburgh Head and Aberdeen. Rising during day to between 80° and 83° over the central parts of England, to 85° or more over southern Europe generally, and to 90° or more at some of the Spanish and Italian stations. Reaching 95° at Florence and 97° at Madrid.

Wind light to moderate from the Southward or South-Eastward in the west and north of our Islands, and from the Eastward in the south and east of England. Northerly or North-Westerly over Scandinavia, Denmark, and Germany; variable in Italy, Algeria, and the south of France; Northerly in Spain. Westerly in the west of France. North-Westerly breezes subsequently setting in over Italy; no important change occurring elsewhere.

Barometer highest, 30·2 ins. and upwards in an anticyclone lying over Holland and the North Sea, and also in a smaller system lying off the west of Norway. Lowest, 29·8 ins. and less in a shallow depression over Lapland; 30·0 ins. and less in another disturbance lying off the west of Ireland. No important change occurring during day, but depression off our western coasts moving slowly northwards.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are show by arrows, which are drawn flying *with the wind*, the force is indicated thus: ⇛ = a heavy gale; → = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breese: and ⊙ = a calm. In the left-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds: o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Germany, Sweden, and Norway, and 7 a.m. in France, Algeria, Italy, Austria, and Russia; that for 6 p.m. is prepared from observations made at 6 p.m. in the British Islands and Franče, 7 p.m. in Algeria, 8 p.m. in Sweden and Norway, Germany, and Austria, and 9 p.m. in Russia, Belgium, and Italy. The time indicated in each case is the standard time for each country.

GENERAL NOTES.

During the early part of the week, when barometrical pressure was highest over central and southern Europe, the weather over the north-western countries was affected by two well-marked cyclonic disturbances.

The first of these lay over the south of Norway on the morning of the 25th June, and subsequently travelled away to the northward, while the second spread slowly over the United Kingdom between the 26th and 28th June, its centre ultimately passing north-eastwards across Scotland and away to the Norwegian coasts. During the progress of the latter system, unsettled showery weather prevailed over the whole of our Islands and their immediate neighbourhood, with thunderstorms in places. On the 28th June, a slight gale from the South-Westward or Westward was experienced in the English Channel.

In the rear of the two disturbances an anticyclone was gradually formed off our south-west coasts, and by the 30th June this had spread over the whole of our Islands and a considerable portion of the Continent, the system remaining in force until the close of the week. Fine dry weather, therefore, set in very generally, with a decided rise of temperature over our Islands, the maximum readings over our central and southern districts on the 1st July being as high as from 80° to 83°.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 152.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	STATIONS	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	42·1	?	35	?	EASTBOURNE	52·8	?	46	?
OSWALDKIRK (Yorkshire)	36·8	?	31	?	TENBY	38·6*	?	34*	?
WORKSOP	51·4	+16·4	44	+14	NEWQUAY	68·5	?	61	?
THURCASTON (Leicestershire)	59·3	+23·3	51	+19	TORQUAY	56·0*	?	50*	?
MARGATE	46·6	?	41	?	ARLEY COTTAGE (County Cavan)	44·8	?	38	?
WESTBOURNE (Sussex)	49·5*	?	43*	?	GUERNSEY	59·8*	?	53*	?
BRIGHTON	48·8	?	43	?					

* The values at Westbourne, Tenby, Torquay and Guernsey are obtained by Jordan's Photographic Recorder.

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WEEKLY WEATHER REPORT.

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VOL. X. No. 27.] *Third Series.* WEEK ENDING SATURDAY, 8TH JULY, 1893. [*Price 6d.* [*Annual Subscription, post paid*, £1 10*s.* 0*d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871-90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the twenty-five years 1866-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90 only BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the ten years 1881-90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

	DISTRICTS. (See p. 152.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 1st, 1893. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	81	50	67·1	53·4	59·8	5 above.	125	+52	0	0	1129	+395	485	− 57
	1. SCOTLAND, EAST	81	43	65·8	52·2	58·6	2 above.	116	+20	0	0	1253	+266	548	− 21
	2. ENGLAND, N.E.	87	47	66·8	52·9	59·3	1 above.	121	+13	0	0	1293	+288	436	− 62
	3. ENGLAND, EAST	92	45	75·9	54·0	64·2	4 above.	155	+35	0	0	1579	+367	524	− 37
	4. MIDLAND COUNTIES	88	46	78·5	54·5	65·7	6 above.	166	+51	0	0	1721	+488	505	− 47
	5. ENGLAND, SOUTH	87	51	74·8	56·6	65·1	5 above.	162	+38	0	0	1741	+416	373	− 43
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	78	49	71·1	53·9	61·9	5 above.	139	+42	0	0	1403	+382	354	− 63
	7. ENGLAND, N.W.	84	50	73·6	56·6	64·5	6 above.	158	+52	0	0	1572	+487	323	− 91
	8. ENGLAND, S.W.	85	50	72·6	56·7	64·1	5 above.	155	+43	0	0	1776	+530	246	− 70
	9. IRELAND, NORTH	77	42	69·5	53·5	60·9	4 above.	132	+33	0	0	1540	+412	258	−104
	10. IRELAND, SOUTH	77	46	70·4	55·0	62·1	4 above.	141	+31	0	0	1752	+447	178	−100
	—CHANNEL ISLANDS	80	52	70·1	58·7	34·0	4 above.	154	+34	0	0	1975	+600	70	− 52

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 152.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the mean for the Week.	From Jan. 1st, 1893. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 1st, 1893. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of ins.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	3	5	3 less.	109	−13	18·9†	− 4·0	35	+ 10	28	+ 9	649	− 49	27	− 2
	1. SCOTLAND, EAST	2	6	0 (average)	89	− 9	11·6	− 2·9	26	?	21	?	794	+ 7	33	+ 1
	2. ENGLAND, N.E.	3	17	12 more.	75	−16	9·7	− 2·1	37	− 6	31	− 4	889	+180	37	+ 7
	3. ENGLAND, EAST	2	5	1 less.	73	−16	7·9	− 3·9	67	+ 22	59	+20	1089	+234	45	+ 9
	4. MIDLAND COUNTIES	3	7	1 more.	74	−14	8·6	− 4·8	54	+ 14	47	+13	1013	+256	42	+ 11
	5. ENGLAND, SOUTH	2	7	2 more.	70	−16	8·5	− 4·3	67	+ 24	59	+19	1114	+302	46	+ 12
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	2	11	2 more.	89	−12	16·3	− 7·2	45	+ 4	39	+ 4	901	+128	37	+ 5
	7. ENGLAND, N.W.	1	7	1 more.	77	−18	11·3	− 3·8	55	+ 13	47	+12	913	+148	38	+ 6
	8. ENGLAND, S.W.	2	11	4 more.	72	−26	12·8	− 5·6	47	− 1	42	− 1	1181*	+284	49	+ 11
	9. IRELAND, NORTH	2	3	4 less.	94	−18	12·9	− 3·8	35	+ 1	30	+ 1	750	+ 17	31	+ 1
	10. IRELAND, SOUTH	3	7	0 (average)	83	−20	14·0	− 4·9	40	+ 1	35	+ 3	862	+ 28	36	+ 1
	—CHANNEL ISLANDS	3	10	5 more.	76	−30	10·4	4·7	52	− 2	47	− 3	1350*	+317	56	+ 13

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather during this period varied considerably. During the earlier part of the time it was mostly fine and bright although sharp thunderstorms and heavy rain were experienced in some localities. Towards the end of the week, however, the conditions became very unsettled generally, with severe thunderstorms in many places, and with heavy falls of rain over the northern parts of England.

Temperature was again above the mean, the excess ranging from 1° in England N.E. and 2° in Scotland E., to 5° or 6° in most other parts of the Kingdom. The highest of the maxima were recorded either on the 7th or 8th, when the thermometer rose to 77° in Ireland, to between 78° and 81° in Scotland, and to between 84° and 92° over England. The lowest of the minima occurred, as a rule, during the middle part of the week, when they ranged from 42° in Ireland N., and 43° in Scotland E., to 52° in the Channel Islands.

Rainfall varied greatly; in Scotland N., Ireland N., and England E. it was again less than the normal, and in Scotland E. and Ireland S. just equal to it; in all other districts there was an excess, that in England N.E. being very large.

Bright Sunshine exceeded the mean in nearly all districts, the percentage of the possible duration ranging from 21 to 39 in Scotland, from 30 to 35 in Ireland, and from 31 to 59 in England.

Barometer and Wind.—During the early days of the week the barometer over our Islands was very uniform, and the winds light and generally anticyclonic. Some local irregularities in pressure, however, caused some thunderstorms in the northern parts of England on Monday, and on the following day a small depression advancing northwards from France caused severe thunderstorms and very heavy rains in some of the south-western counties. Towards the end of the period a depression approached our Islands from the Atlantic, and moving north-eastwards and northwards over our western and northern districts, produced severe thunderstorms and heavy rain in nearly all parts of the Kingdom.

* This value has been altered slightly owing to the receipt of additional information for a preceding week.
† The corresponding value in last week's report should read "18·4."

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II.—DATA from which the SUMMARY on page 157 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	←				Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	69	50	60·1	50·6	55·0	+ 3·3	91	0	2	0·33	−0·46	*	*	*	*
	Stornoway	70	50	67·0	53·1	59·6	+ 5·9	122	0	3	0·61	−0·09	46·9	+10·3	38	+ 9
	Wick	70	51	62·9	52·4	57·3	+ 2·9	107	0	1	0·05	−0·43	*	*	*	*
	Lairg Ⓢ	79	51	66·7	52·7	59·2	+ 4·4	120	0	6	0·66	+0·05	*	*	*	*
	Glencarron Ⓢ	79	51	71·3	54·0	62·1	+ 8·0	141	0	3	0·87	−0·43	*	*	*	*
	Fort Augustus Ⓢ	81	54	69·4	55·3	61·9	+ 5·7	139	0	4	0·36	−0·30	17·1	?	14	?
	Fort William Ⓢ	78	52	72·5	55·8	63·6	+ 7·1	151	0	3	1·03	−0·07	39·6	?	32	?
1. SCOTLAND, E.	Nairn	81	51	69·4	53·7	61·0	+ 4·1	133	0	1	0·20	−0·30	*	*	*	*
	Aberdeen	64	51	60·3	52·6	56·2	− 0·3	99	0	2	0·40	−0·12	14·4	−26·7	12	−22
	Braemar Ⓢ	74	43	68·2	49·7	58·3	+ 4·0	114	0	2	0·69	+0·07	38·0†	?†	31†	?†
	Ochtertyre Ⓢ	79	50	68·4	53·0	60·2	+ 3·5	127	0	2	0·65	−0·05	*	*	*	*
	Leith	69	50	62·1	52·4	56·9	− 0·8	104	0	2	0·59	0·00	*	*	*	*
	Marchmont Ⓢ	80	49	66·6	52·0	58·8	+ 2·5	118	0	4	1·21	+0·49	30·3	?	25	?
2. ENGLAND, N.E.	Alnwick Castle	67	51	62·7	53·1	57·6	+ 1·3	109	0	3	1·27	+0·68	*	*	*	*
	Durham	81	49	71·1	52·3	61·1	+ 3·0	134	0	2	2·86	+2·26	32·4	− 3·8	27	− 4
	Shields	65	47	61·7	51·9	56·5	− 0·8	102	0	3	1·34	+0·84	*	*	*	*
	Scarborough Ⓜ	72	52	64·3	53·3	58·1	− 0·2	113	0	3	1·16	+0·60	*	*	*	*
	York	87	47	77·1	52·7	64·1	+ 4·8	155	0	4	2·40	+1·85				
	Spurn Head	66	52	63·6	54·1	58·5	− 0·2	116	0	3	1·42	+1·05	*	*	*	*
3. ENGLAND, E.	Hillington Ⓜ	90	50	78·4	54·2	65·5	+ 5·8	165	0	3	1·00	+0·40	61·1	+18·4	53	+14
	Yarmouth	73	53	65·6	56·0	60·5	+ 1·0	130	0	1	0·18	−0·40	*	*	*	*
	Geldeston	85	45	72·7	52·2	61·7	+ 2·0	138	0	3	0·37	−0·13	72·5	+25·7	64	+22
	Cambridge	92	50	83·0	53·9	67·4	+ 6·7	178	0	2	0·17	−0·38	71·0	+28·0	62	+24
	Rothamsted	84	50	80·0	53·8	66·0	+ 6·5	168	0	2	0·59	−0·01	63·5	?	56	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	88	48	79·7	51·6	64·7	+ 4·9	159	0	4	1·06	+0·46	*	*	*	*
	Loughborough	88	52	80·4	56·3	67·5	+ 6·4	179	0	3	0·06	−0·44	*	*	*	*
	Stamford (Ketton Hall)	87	51	78·7	54·6	65·8	+ 5·1	167	0	5	0·68	+0·10	*	*	*	*
	Cheadle Ⓜ	82	50	76·7	53·5	64·3	+ 7·0	156	0	3	2·20	+1·51	*	*	*	*
	Churchstoke Ⓜ	82	46	75·6	53·4	63·7	+ 6·1	152	0	1	0·29	−0·28	46·1	+ 6·3	40	+ 5
	Hereford Ⓜ	85	51	78·8	55·8	66·5	+ 6·6	172	0	3	0·50	−0·02	*	*	*	*
	Cirencester	83	51	78·3	54·7	65·8	+ 7·3	167	0	3	0·50	−0·12	60·9	+19·7	53	+17
	Oxford	84	52	79·7	56·0	67·0	+ 6·8	175	0	4	0·46	−0·09	62·9	+20·5	55	+18
5. ENGLAND, S.	London	87	54	81·0	57·4	68·4	+ 6·3	185	0	2	0·60	+0·07	57·9†	+19·2†	51†	+16†
	North Foreland	84	56	68·6	57·6	62·7	+ 3·1	145	0	2	0·15	?	*	*	*	*
	Strathfield Turgiss Ⓜ	86	51	81·7	53·5	66·6	+ 5·9	172	0	?	?	?	*	*	*	*
	Dungeness	73	52	69·1	57·7	63·0	+ 2·5	147	0	2	0·78	+0·38	*	*	*	*
	Hastings (St. Leonards)	79	53	74·8	57·1	65·3	+ 4·9	163	0	2	0·53	+0·09	79·0	+29·8	70	+26
	Southampton	81	54	77·0	56·7	66·1	+ 5·1	169	0	2	0·72	+0·23	63·6	+17·6	56	+14
	Hurst Castle	76	55	72·0	58·1	64·6	+ 4·1	158	0	2	1·00	+0·50	*	*	*	*
	Stowell Ⓜ	80	52	74·5	54·7	63·9	+ 4·3	153	0	3	0·95	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	75	50	71·4	56·1	63·2	+ 6·6	148	0	2	0·83	−0·41	*	*	*	*
	Glasgow	78	52	69·7	53·9	61·3	+ 4·4	135	0	2	0·49	−0·26	34·6	+ 0·7	29	0
	Ardrossan	74	50	69·4	52·7	60·5	+ 3·0	130	0	3	2·13	+1·51	*	*	*	*
	Glenlee Ⓢ	76	49	73·3	51·4	61·6	+ 5·4	137	0	1	0·67	−0·21	*	*	*	*
	Douglas (Isle of Man)	73	53	71·7	55·4	63·0	+ 6·3	147	0	2	1·27	+0·67	56·2	+ 9·2	48	+ 7
7. ENGLAND, N.W.	Stonyhurst	80	50	73·7	55·1	63·8	+ 5·9	153	0	1	0·27	−0·67	56·6	+17·1	48	+14
	Blackpool Ⓜ	84	50	75·9	56·5	65·5	+ 7·0	165	0	1	0·96	+0·36	58·7	+17·7	50	+15
	Manchester	83	52	?76·2	56·4	?65·6	? + 7·5	?165	0	1	0·10	−0·69	57·8†	?	50†	?
	Liverpool Obsy. (Bidston)	84	53	75·1	57·9	65·9	+ 6·5	167	0	1	1·40	+0·80	*	*	*	*
	Llandudno Ⓜ	79	54	71·5	57·1	63·8	+ 4·3	153	0	1	1·21	+0·71	44·8	+ 6·6	39	+ 6
	Holyhead	75	55	69·4	56·6	62·6	+ 4·3	144	0	2	0·33	−0·17	*	*	*	*
8. ENGLAND, S.W.	Llandovery	84	50	78·6	54·9	66·0	+ 6·8	168	0	3	0·56	−0·24	*	*	*	*
	Pembroke	74	56	68·4	57·6	62·6	+ 4·9	144	0	1	0·14	−0·36	43·2	− 5·8	38	− 6
	Bristol (Montpelier)	85	53	79·9	58·1	68·2	+ 8·0	183	0	3	0·39	?				
	Arlington (N. Devon)	78	52	72·3	54·7	62·8	+ 5·2	146	0	1	0·59	−0·39	*	*	*	*
	Cullompton Ⓜ	80	52	74·8	54·7	64·1	+ 4·7	155	0	3	1·20	+0·58	42·7	+ 0·9	38	+ 1
	Falmouth	73	57	69·1	58·2	63·3	+ 3·8	149	0	2	1·70	+1·02	49·4	− 0·8	44	0
	Plymouth	75	56	69·7	57·4	63·1	+ 2·2	148	0	2	1·63	+1·06	45·6	+ 0·3	41	0
	Prawle Point	74	55	67·7	57·6	62·3	+ 4·1	142	0	2	2·31	+1·84	*	*	*	*
9. IRELAND, N.	Malin Head	74	55	65·1	56·3	60·4	+ 3·8	129	0	2	0·04	?	*	*	*	*
	Londonderry	77	49	74·3	53·6	63·2	+ 5·3	148	0	2	0·17	−0·54	*	*	*	*
	Edenfel (Omagh)	74	46	70·9	52·0	60·8	+ 3·6	132	0	2	0·23	−0·47	*	*	*	
	Belmullet	75	55	68·7	56·4	62·1	+ 5·2	141	0	4	0·49	?	*	*	*	*
	Markree Castle	73	42	70·2	50·9	59·9	+ 3·7	125	0	3	0·61	−0·18	28·9	− 2·8	25	− 2
	Brookeborough	74	45	70·3	51·0	60·0	+ 3·6	126	0	1	0·09	−0·63	*	*	*	*
	Armagh	72	47	69·0	53·7	60·8	+ 3·2	132	0	1	0·10	−0·50	41·4	+ 6·7	35	+ 5
	Donaghadee	72	53	66·4	55·1	60·4	+ 3·5	129	0	2	0·20	−0·34	*	*	*	*
	Edgeworthstown	74	49	70·6	52·5	60·9	+ 3·7	132	0	1	0·47	−0·29	*	*	*	*
10. IRELAND, S.	Dublin	72	54	70·5	56·9	63·2	+ 3·7	148	0	1	0·19	−0·29	44·4	+ 6·4	38	+ 6
	Parsonstown	74	49	71·9	53·9	62·3	+ 4·6	142	0	1	0·31	−0·31	32·5	− 3·5	28	− 3
	Kilkenny	76	50	71·3	54·7	62·4	+ 4·2	143	0	2	0·35	−0·17	*	*	*	*
	Waterford	77	51	73·4	54·7	63·4	+ 4·5	150	0	3	0·10	−0·52	*	*	*	*
	Roche's Point	70	55	67·6	56·6	61·7	+ 2·3	138	0	2	0·70	−0·03	*	*	*	*
	Valencia	71	51	67·1	54·9	60·6	+ 2·4	130	0	3	0·99	+0·14	44·0	+ 5·0	39	+ 5
	Killarney	75	46	70·2	53·3	61·2	+ 3·6	134	0	6	1·80	?	*	*	*	*
	Foynes	75	52	?70·8	?54·9	?62·3	? + 4·2	?142	0	?4	0·96	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	71	58	68·1	59·3	63·4	+ 4·2	150	0	2	0·44	−0·06	*	*	*	*
	Jersey	80	52	72·0	58·1	64·6	+ 3·6	158	0	3	1·62	+1·11	50·0	− 2·0	45	− 3

Stations marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row) at the Kew Observatory, and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

NOTE.—The Reports from Newton Reigny have now ceased.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W. R. H. SCOTT, F.R.S., SECRETARY.

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VOL. X. No. 24.] *Third Series.* WEEK ENDING SATURDAY, 17TH JUNE, 1893. [*Price 6d.* [*Annual Subscription, post paid, £1 10s. 0d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871-90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the twenty-five years 1866-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90 only BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the ten years 1881-90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

	DISTRICTS. (See p. 134.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 1st, 1893. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	79	42	69·4	49·2	58·6	6 above.	116	+55	0	− 1	834	+331	485	− 57
	1. SCOTLAND, EAST	83	38	70·3	48·6	58·7	5 above.	117	+36	0	0	939	+252	548	− 21
	2. ENGLAND, N.E.	83	44	65·0	49·6	56·8	2 above.	104	+19	0	0	945	+258	436	− 62
	3. ENGLAND, EAST	87	45	71·9	50·7	60·6	4 above.	130	+32	0	0	1176	+322	524	− 37
	4. MIDLAND COUNTIES	85	39	74·9	49·1	61·1	5 above.	134	+36	0	0	1301	+422	505	− 47
	5. ENGLAND, SOUTH	88	44	73·3	53·3	62·6	5 above.	144	+39	0	0	1313	+361	373	− 43
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	77	43	71·8	51·9	61·1	6 above.	134	+50	0	0	1063	+352	354	− 63
	7. ENGLAND, N.W.	82	39	71·9	51·6	61·0	5 above.	133	+42	0	0	1177	+422	323	− 91
	8. ENGLAND, S.W.	87	41	72·5	53·0	62·1	5 above.	141	+44	0	0	1359	+455	246	− 70
	9. IRELAND, NORTH	82	44	71·7	53·5	61·9	7 above.	139	+52	0	0	1189	+378	258	−104
	10. IRELAND, SOUTH	78	46	70·5	53·7	61·5	5 above.	137	+42	0	0	1372	+408	178	−100
	—CHANNEL ISLANDS	81	54	68·9	56·7	62·4	5 above.	143	+42	0	0	1534	+515	70	− 52

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 134.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the mean for the Week.	From Jan. 1st, 1893. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 1st, 1893. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of in.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	1	1	6 less.	99	−12	17·5	− 3·2	66	+ 34	54	+28	559	− 29	27	− 2
	1. SCOTLAND, EAST	0	—	5 less.	79	− 9	8·8	− 4·0	73	+ 16	60	+12	698	+ 39	34	+ 2
	2. ENGLAND, N.E.	0	—	4 less.	65	−18	7·0	− 3·3	62	+ 24	52	+21	780	+199	38	+ 10
	3. ENGLAND, EAST	0	—	5 less.	64	−17	6·6	− 3·6	70	+ 22	60	+21	926	+214	45	+ 10
	4. MIDLAND COUNTIES	1	1	5 less.	65	−14	7·1	− 4·6	58	+ 16	50	+15	801	+235	42	+ 12
	5. ENGLAND, SOUTH	1	less than ½	4 less.	61	−17	7·0	− 4·4	73	+ 26	63	+23	948	+278	46	+ 13
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	0	—	7 less.	81	−13	14·2	− 7·0	72	+ 28	60	+23	762	+118	37	+ 6
	7. ENGLAND, N.W.	1	1	4 less.	69	−17	9·1	− 4·2	79	+ 36	67	+32	780	+142	38	+ 7
	8. ENGLAND, S.W.	1	1	4 less.	64	−25	10·8	− 5·7	69	+ 19	61	+17	1002	+254	49	+ 13
	9. IRELAND, NORTH	1	1	5 less.	84	−16	11·4	− 3·4	51	+ 15	43	+14	620	− 6	30	0
	10. IRELAND, SOUTH	1	less than ½	6 less.	73	−21	12·1	− 4·9	42	− 2	36	− 1	724	+ 10	35	0
	—CHANNEL ISLANDS	1	less than ½	4 less.	69	−27	8·8	− 4·3	80	+ 23	71	+21	1149	+283	56	+ 14

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather was again fine, bright, and dry very generally. During the middle part of the period thunder and lightning occurred in almost all districts, but the amount of rainfall recorded was in most cases very slight, and on several occasions sharp storms of thunder and lightning occurred without any rain.

Temperature continued above the mean, the excess ranging from 2° in England N.E., and 4° in England E., to 6° in Scotland N. and W., and to 7° in Ireland N. The highest of the maxima occurred either on the 16th or 17th, when they ranged from 77° to 83° in Scotland, from 78° to 82° in Ireland, and from 82° to 88° in England. The lowest of the minima were registered during the earlier half of the period, when they varied from 38° in Scotland E., and 39° in the Midland Counties and England N.W., to 46° in Ireland S., and to 54° in the Channel Islands.

Rainfall was less than the mean in all districts. Over the greater part of England and Scotland there was no fall whatever.

Bright Sunshine was very prevalent, and considerably exceeded the normal in nearly all districts. The percentage of the possible duration ranged from 71 in the Channel Islands, 67 in England N.W., and from between 50 and 65 over Great Britain generally, to 43 in Ireland N., and 36 in Ireland S.

Barometer and Wind.—During the early part of the week the distribution of pressure was anticyclonic and the winds light from the Eastward. By Wednesday, however, shallow low pressure systems were spreading over our southern districts from France, and on Thursday a large depression over the Atlantic was affecting our western and north-western regions, causing the wind in these parts to shift Southwards. Towards the close of the week these depressions had passed away and anticyclonic conditions had again become prevalent.

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II.—DATA from which the SUMMARY on page 139 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°				Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	67	47	58·7	48·0	53·0	+ 3·5	77	0	1	0·02	−0·46	*	*	*	*
	Stornoway	71	45	68·9	48·1	57·8	+ 6·1	111	0	1	0·02	−0·66	75·5	+33·7	61	+28
	Wick	76	42	67·0	49·1	57·4	+ 5·5	108	0	0	—	−0·40	*	*	*	*
	Lairg Ⓢ	79	42	76·0	47·6	60·8	+ 8·3	132	0	0	—	−0·55	*	*	*	*
	Glencarron Ⓢ	76	45	72·6	50·1	60·6	+ 8·7	130	0	3	0·45	−0·76	*	*	*	*
	Fort Augustus Ⓢ	78	42	72·9	49·6	60·4	+ 6·5	129	0	3	0·12	−0·38	59·0	?	41	?
	Fort William Ⓢ	74	48	70·0	52·0	60·4	+ 5·9	129	0	2	0·24	−0·70	72·4	?	59	?
1. SCOTLAND, E.	Nairn	80	38	73·1	47·7	59·5	+ 4·9	123	0	1	0·04	−0·36	*	*	*	*
	Aberdeen	77	47	63·4	50·0	56·2	+ 2·5	99	0	0	—	−0·40	60·6	+14·8	49	+12
	Braemar Ⓢ	78	38	71·8	43·3	56 8	+ 5·0	104	0	0	—	−0·55	78·2†	?†	64†	?†
	Ochtertyre Ⓢ	83	42	75·3	50·0	61·8	+ 7·5	139	0	0	—	−0·62	*	*	*	*
	Leith Ⓢ	80	47	68·0	51·3	59·1	+ 3·8	120	0	0	—	−0·40	*	*	*	*
	Marchmont Ⓢ	81	42	70·3	48·6	58·7	+ 5·2	117	0	0	—	−0·58	79·3	?	65	?
2. ENGLAND, N.E.	Alnwick Castle	75	45	64·3	51·0	57·2	+ 3·0	106	0	0	—	−0·42	*	*	*	*
	Durham	83	46	69·8	49·7	59·1	+ 4·1	120	0	0	—	−0·44	64·5	+26·5	54	+22
	Shields	74	48	63·3	49·4	55·9	+ 1·4	97	0	0	—	−0·40	*	*	*	*
	Scarborough Ⓜ	73	48	60·7	49·9	54·9	− 0·2	90	0	1	0·01	−0·46	*	*	*	*
	York	82	44	72·7	47·4	59·2	+ 2·8	120	0	0	—	−0·51	63·0	+23·6	53	+20
	Spurn Head	67	49	59·3	50·3	54·5	− 1·1	88	0	0	—	−0·35	*	*	*	*
3. ENGLAND, E.	Hillington Ⓜ	84	47	73·1	50·1	60·8	+ 3·9	132	0	0	—	−0·50	67·7	+22·7	58	+19
	Yarmouth	68	51	62·6	53·3	57·6	+ 1·7	109	0	0	—	−0·45	*	*	*	*
	Geldeston	79	45	68·0	50·5	58·6	+ 2·2	116	0	0	—	−0·38	72·5	+23·0	63	+20
	Cambridge	87	45	79·9	49·6	63·7	+ 6·0	152	0	0	—	−0·52	70·3	+25·3	61	+22
	Rothamsted	84	46	76·1	49·9	62·1	+ 5·6	141	0	0	—	−0·50	68·0	?	59	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	85	39	74·6	47·6	60·2	+ 3·4	127	0	0	—	−0·52	*	*	*	*
	Loughborough	85	40	75·6	47·7	60·7	+ 2·5	131	0	0	—	−0·52	*	*	*	*
	Stamford (Ketton Hall)	85	45	75·3	47·6	60·6	+ 2·8	130	0	1	0·01	−0·42	*	*	*	*
	Cheadle Ⓜ	82	45	72·0	50·5	60·5	+ 5·9	130	0	0	—	−0·67	*	*	*	*
	Churchstoke Ⓜ	82	40	73·0	47·6	59·4	+ 4·7	122	0	2	0·10	−0·39	61·1	+19·7	53	+17
	Hereford Ⓜ	85	42	76·0	50·1	62·1	+ 4·8	141	0	2	0·13	−0·37	*	*	*	*
	Cirencester	83	41	76·0	50·7	62·9	+ 7·0	146	0	4	0·20	−0·35	60·3	+16·4	52	+14
	Oxford	85	45	76·6	50·6	62·7	+ 5·3	145	0	1	0·04	−0·48	60·7	+16·8	53	+15
5. ENGLAND, S.	London	87	50	78·0	54·3	65·3	+ 6·3	163	0	0	—	−0·50	69·4†	+28·5†	60†	+24†
	North Foreland	65	51	63·0	54·0	58·2	+ 1·9	113	0	1	0·01	?	*	*	*	*
	Strathfield Turgiss Ⓜ	88	44	78·8	48·2	62·8	+ 5·3	146	0	1	0·04	−0·41	*	*	*	*
	Dungeness	72	51	67·6	54·1	60·4	+ 2·9	129	0	0	—	−0·38	*	*	*	*
	Hastings (St. Leonards)	81	49	72·5	54·9	63·1	+ 5·4	148	0	0	—	−0·40	83·3	+32·1	73	+28
	Southampton	88	48	78·5	54·3	65·6	+ 7·2	165	0	1	0·01	−0·45	67·4	+19·6	59	+17
	Hurst Castle	83	50	73·4	55·0	63·6	+ 6·0	151	0	0	—	−0·45	*	*	*	*
	Stowell Ⓜ	84	44	74·4	51·3	62·1	+ 5·2	141	0	2	0·05	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	74	50	71·5	53·0	61·6	+ 7·1	137	0	0	—	−1·12	*	*	*	*
	Glasgow	77	50	73·3	53·5	62·7	+ 8·0	145	0	0	—	−0·62	73·1	+35·9	60	+29
	Ardrossan	75	50	71·4	52·3	61·2	+ 5·8	134	0	0	—	−0·59	*	*	*	*
	Glenlee Ⓢ	76	44	73·4	48·1	59·9	+ 5·7	125	0	0	—	−0·72	*	*	*	*
	Douglas (Isle of Man)	75	43	69·2	52·4	60·2	+ 5·5	127	0	1	0·03	−0·47	69·8	+19·0	59	+16
7. ENGLAND, N.W.	Newton Reigny	80	39	72·5	46·8	58·8	+ 4·9	118	0	0	—	−0·50	89·5	+44·3	75	+35
	Stonyhurst	79	43	71·5	49·5	59·8	+ 4·3	125	0	0	—	−0·76	82·3	+39·1	70	+33
	Blackpool Ⓜ	80	47	73·1	51·9	61·8	+ 6·1	139	0	0	—	−0·49	75·7	+31·5	64	+27
	Manchester	82	46	73·0	50·5	61·0	+ 5·2	133	0	0	—	−0·69	71·5†	?	62†	?
	Liverpool Obsy. (Bidston)	80	49	72·9	52·9	62·2	+ 5·3	141	0	2	0·18	−0·25	*	*	*	*
	Llandudno Ⓜ	74	48	70·4	54·9	62·1	+ 5·2	141	0	1	0·56	+0·16	75·2	+33·4	65	+29
	Holyhead	73	52	69·6	54·4	61·5	+ 5·6	137	0	2	0·11	−0·35	*	*	*	*
8. ENGLAND, S.W.	Llandovery	87	41	78·3	49·1	62·7	+ 5·7	145	0	3	0·15	−0·54	*	*	*	*
	Pembroke	78	52	67·7	55·3	61·1	+ 5·6	134	0	0	—	−0·45	68·1	+13·5	59	+12
	Bristol (Montpelier)	87	47	77·7	52·7	64·3	+ 6·7	156	0	2	0·27	?	*	*	*	*
	Arlington (N. Devon)	82	46	72·7	50·9	61·0	+ 5·8	133	0	2	0·57	−0·21	*	*	*	*
	Cullompton Ⓜ	84	42	75·4	50·0	61·8	+ 5·0	139	0	1	0·01	−0·52	67·8	+22·5	59	+19
	Falmouth	76	55	67·3	56·5	61·5	+ 4·8	137	0	1	0·07	−0·53	68·5	+15·9	61	+14
	Plymouth	81	51	71·0	54·7	62·3	+ 3·5	142	0	0	—	−0·47	72·5	+25·2	64	+22
	Prawle Point	76	51	70·0	54·6	61·8	+ 6·3	139	0	1	0·08	−0·29	*	*	*	*
9. IRELAND, N.	Malin Head	68	53	65·6	56·6	60·8	+ 5·8	132	0	0	—	?	*	*	*	*
	Londonderry	82	50	78·5	54·6	65·7	+ 9·5	166	0	2	0·43	−0·16	*	*	*	*
	Edenfel (Omagh)	78	44	74·9	53·0	63·2	+ 8·1	148	0	1	0·01	−0·59	*	*	*	
	Belmullet	75	53	70·0	56·9	63·0	+ 8·1	147	0	2	0·02	?	*	*	*	*
	Markree Castle	77	44	71·7	49·5	59·8	+ 5·5	125	0	1	0·38	−0·32	49·6	+12·6	42	+11
	Brookeborough	79	45	72·8	51·2	61·3	+ 6·7	135	0	1	0·02	−0·66	*	*	*	*
	Armagh	77	45	71·4	51·6	60·8	+ 5·5	132	0	0	—	−0·50	59·8	+19·8	51	+17
	Donaghadee	74	52	67·7	55·3	61·1	+ 6·3	134	0	1	0·01	−0·44	*	*	*	*
	Edgeworthstown	81	47	72·3	52·6	61·8	+ 6·6	139	0	0	—	−0·70	*	*	*	*
10. IRELAND, S.	Dublin	73	50	68·4	56·0	61·8	+ 4·7	139	0	1	0·05	−0·37	59·7	+16·2	51	+14
	Parsonstown	75	46	72·4	52·3	61·7	+ 6·2	138	0	0	—	−0·55	34·3	− 6·5	30	− 5
	Kilkenny	74	46	71·4	51·4	60·7	+ 4·5	131	0	0	—	−0·52	*	*	*	*
	Waterford	78	48	71·8	52·4	61·4	+ 4·4	136	0	0	—	−0·56	*	*	*	*
	Roche's Point	71	52	67·4	56·1	61·4	+ 4·2	136	0	0	—	−0·72	*	*	*	*
	Valencia	74	49	69·1	53·9	61·0	+ 4·8	133	0	1	0·01	−0·74	31·9	−14·4	28	−12
	Killarney	75	47	70·7	51·1	60·2	+ 4·6	127	0	1	0·02	?	*	*	*	*
	Foynes	78	46	72·7	56·1	63·8	+ 8·1	153	0	1	0·09	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	69	54	66·1	56·9	61·2	+ 4·5	134	0	0	—	−0·41	*	*	*	*
	Jersey	81	54	71·6	56·4	63·5	+ 5·5	151	0	1	0·01	−0·44	78·2	+23·2	70	+21

Stations marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

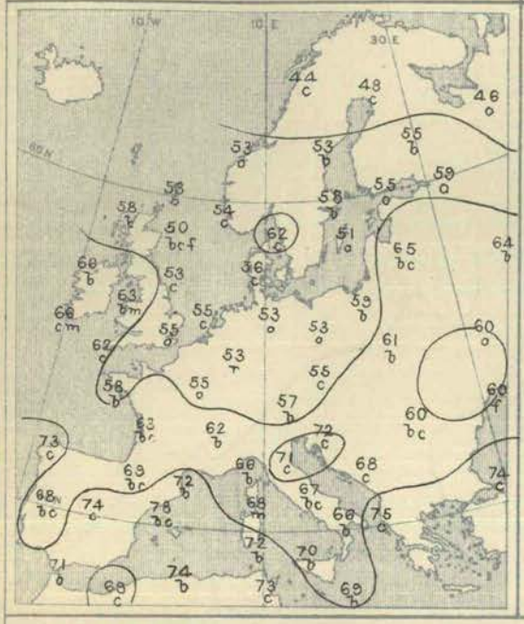
* An asterisk is inserted in all places for which the information is not usually received.

† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row) at the Kew Observatory, and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

Sunday, 11th June.

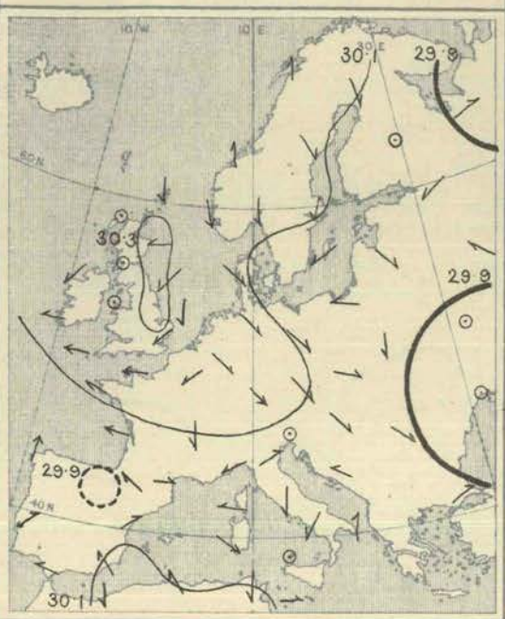
Temperature and Weather.

8 a.m.

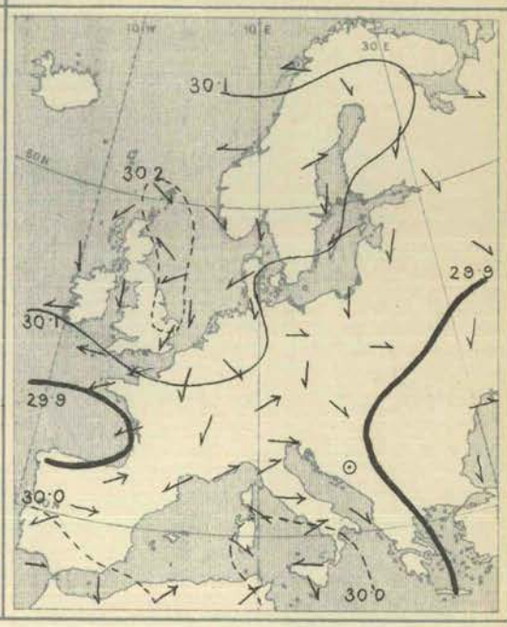


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning fine over the Mediterranean, southern and western Europe, including the British Islands; fine also over Austria, eastern Prussia, and at many stations over the northern half of Russia. Cloudy or overcast elsewhere. Rain later—in small quantity at some of the German and Austrian stations, but considerable at Fanö and Bodö. The newspapers report the occurrence of a heavy thunderstorm at Swinford (Co. Mayo).

Temperature in morning highest, 70° to 75° on the southern and western sides of the Mediterranean and at Constantinople, 60° or more over southern and eastern Europe generally; as well as in the south-west of our Islands, exceeding 50° almost everywhere else. Lowest, 44° at Bodö, 46° at Archangel, 48° at Haparanda, and 50° at Aberdeen. Rising later to 96° at Madrid, to 93° at Biarritz, to more than 80° over Spain and the southern parts of France and Italy, as a whole, and to between 70° and 75° over Ireland, but not touching 70° over Germany, the north of France, England, or Scotland.

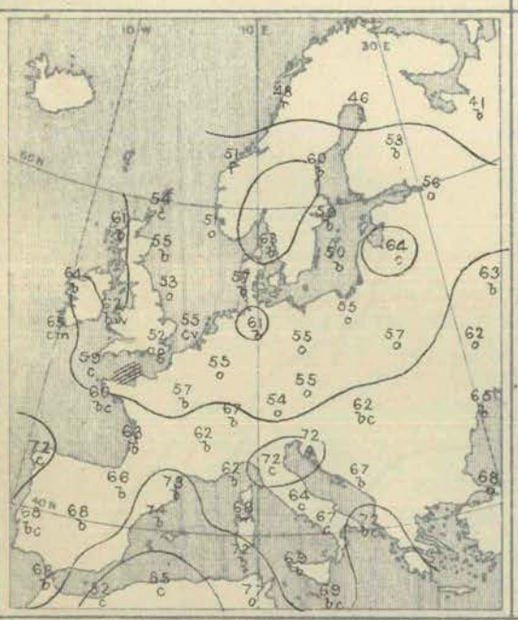
Wind light to moderate from the Northward over Scandinavia and the North Sea, and from the Eastward over Ireland, the western parts of the English Channel and the Bay of Biscay; North-Westerly over Germany and Austria; light and variable over the Mediterranean. No decided change later.

Barometer highest, 30·3 ins. and more to 30·1 ins. in an anticyclone covering the whole of the British Islands and north-western Europe; exceeding 30·1 ins. over Algeria, and exceeding 30·0 ins. over central Russia. Lowest, below 30·0 ins. off the north-west coast of Spain, and in a "hollow" stretching thence in an easterly direction across the north of Spain to the south-west of France; below 29·9 ins. both over northern and southern Russia. Falling over western and northern Europe later; rising slightly over Spain.

Monday, 12th June.

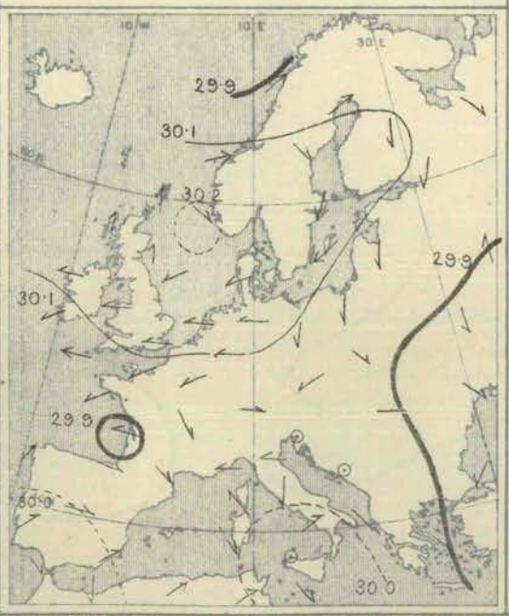
Temperature and Weather.

8 a.m.

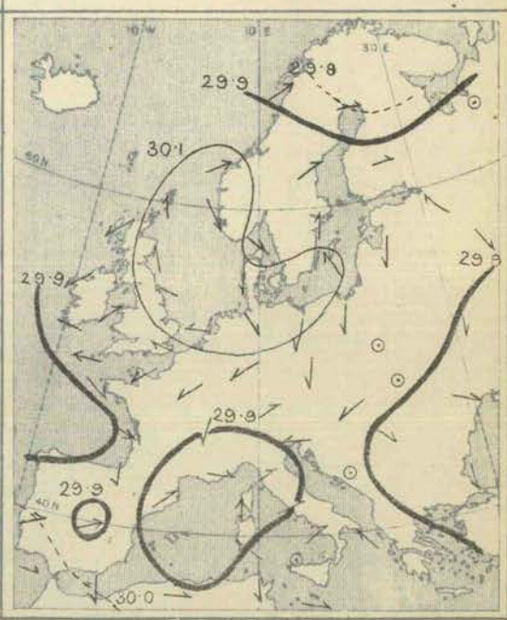


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning cloudy or overcast over England, the Netherlands, and the greater part of central Europe, as well as in the west of France, with rain at Bodö and Vienna. Fine and bright in almost all other localities. Sky clearing later over the southern parts of England, and weather remaining very dry over the entire Kingdom. Rain falling over the northern parts of Scandinavia, as well as at Berlin and some of the Russian and Austrian stations. Thunderstorms occurring at Nantes and Nice.

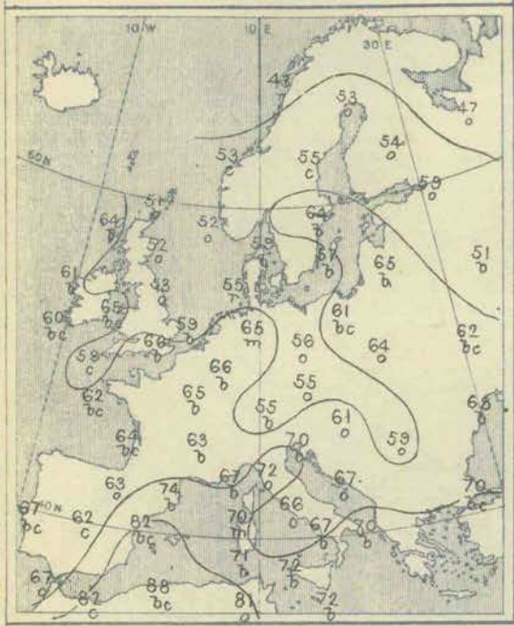
Temperature risen a little over Scandinavia, Denmark, and the eastern parts of Great Britain, fallen in the south of England, changed irregularly elsewhere. Morning readings highest, 85° at Algiers, 82° at Oran, and 77° at La Calle; above 65° over southern Europe generally. Lowest, (1) 41° at Archangel, 46° at Haparanda, and 48° at Bodö; (2) 51° at Oxford, and 52° at Loughborough and in London; below 55° over all the eastern and central parts of England. Rising during day to 70° or more in many parts of Ireland and the west of Scotland and also at Cambridge, but remaining below 60° on our east coasts. Exceeding 80° over the greater part of southern Europe, and reaching 90° at Perpignan.

Wind Easterly or North-Easterly over Ireland, England, the Netherlands, Germany, and the greater part of France; light or moderate in force generally, but strong at the mouth of the Channel. Light from the Southward in Scotland. Strong from the South-Westward over the northern parts of Scandinavia. Northerly at most of the Russian stations; variable in Italy, South-Westerly in Spain and Algeria, Westerly in the south of France. No important change occurring later.

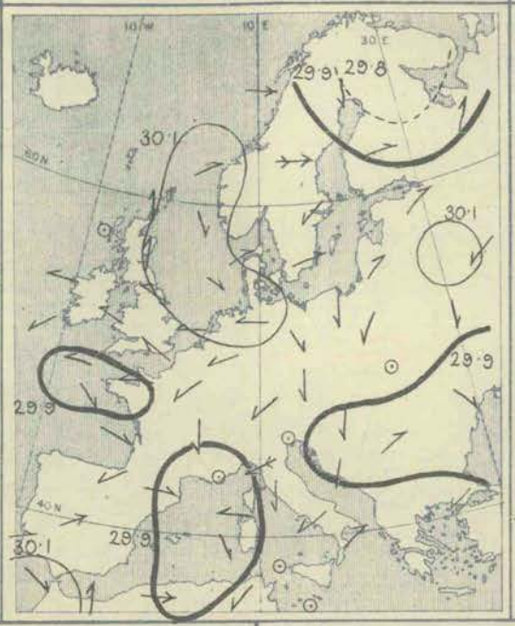
Barometer highest, 30·1 ins. to 30·2 ins. in a large anticyclone covering the greater part of our Islands, with the North Sea, the Netherlands, Denmark, Finland, and the southern half of Scandinavia; 30·0 ins. and upwards in two other systems lying respectively over the south of Spain and the central parts of the Mediterranean. Lowest, 29·8 ins. and less in a shallow depression over the south of Russia; 29·9 ins. and less in another shallow system over the west of France, and also in a more important disturbance off the north-west of Norway. French depression subsequently moving slowly northwards; barometer falling in most parts of north-western Europe.

Tuesday, 13th June.

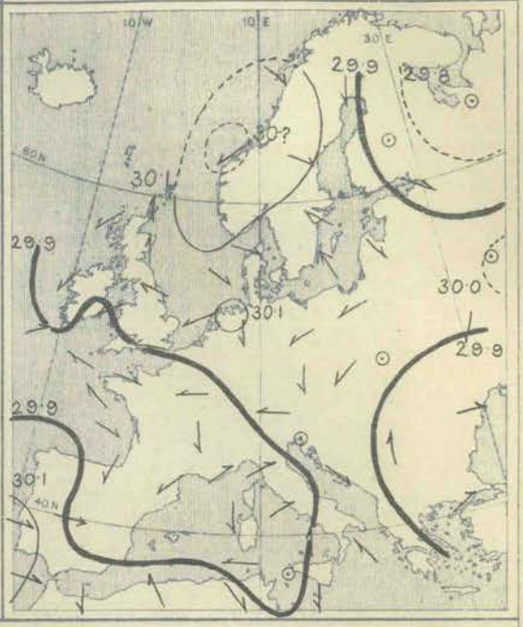
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fine over the greater part of our Islands and the Continent, but foggy or misty at several of our own northern and eastern stations. Dull over the northern parts of Russia and Scandinavia, as well as over eastern Germany, Austria, and northern Italy, rainy at Bodö, Fanö, and Vienna. Thunderstorms occurring later at Holyhead and Jersey, and also in the south of France; heavy rain falling in the north-west of France, and small quantities in the Channel Islands and south of Devonshire.

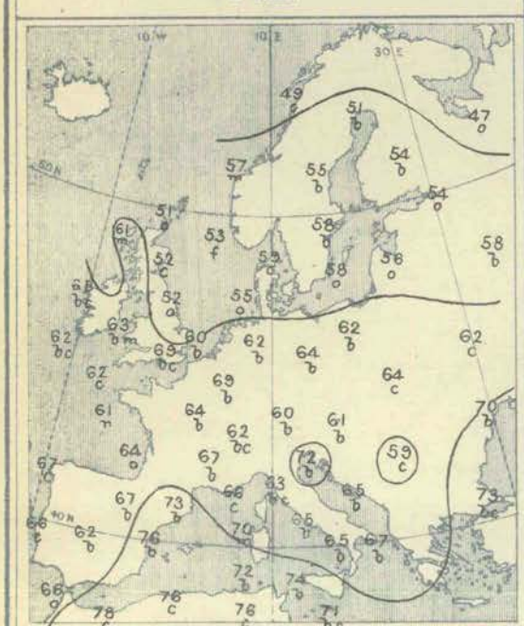
Temperature fallen in Ireland and Scotland, risen in most other countries—quickly over the south-eastern parts of England. Morning readings highest, 88° at Algiers and Aumale, 82° at Barcelona, and 81° at La Calle and Tunis; above 70° at the Mediterranean stations generally, and above 65° over Belgium and the inland parts of the south-east of England. Lowest, 43° at Bodö, 47° at Archangel, 51° at Moscow and Sumburgh Head, and 52° to 53° on the north-east coasts of Great Britain. Rising during day to 70° and upwards at several of our western and southern stations, to 75° and upwards over central England, and to 81° at Cambridge. Reaching 82° at Paris, 86° at Barcelona, and 88° at Perpignan.

Wind light to moderate from the Eastward or North-Eastward over Ireland, England, the Netherlands, western Germany, central France, and the greater part of Italy; Westerly over Spain and the Bay of Biscay. Light from the Southward in the north and east of Scotland. Westerly over the northern parts of Scandinavia and Russia, with a gale at Hernösand. Light from the Northward or North-Westward over eastern Germany, Austria, and the central and southern parts of Russia. No important change occurring during day.

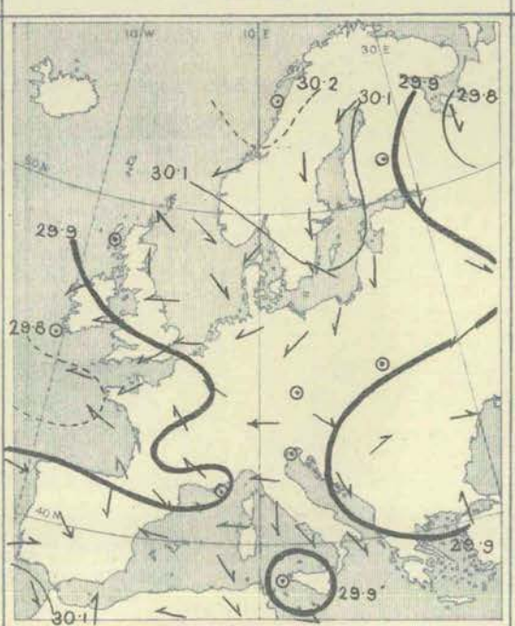
Barometer highest, 30·1 ins. and upwards in a large anticyclone lying over Denmark, the North Sea, and the west of Norway, as well as in smaller areas lying respectively over central Russia, and over Morocco and the extreme south of Spain. Lowest, 29·8 ins. and less in a depression over Lapland, and in a small disturbance near Kharkov; 29·9 ins. and less in shallow systems lying respectively over the north-west of France and the western parts of the English Channel, and over the western part of the Mediterranean. Further shallow disturbances forming later over France; barometer falling in nearly all parts of western Europe.

Wednesday, 14th June.

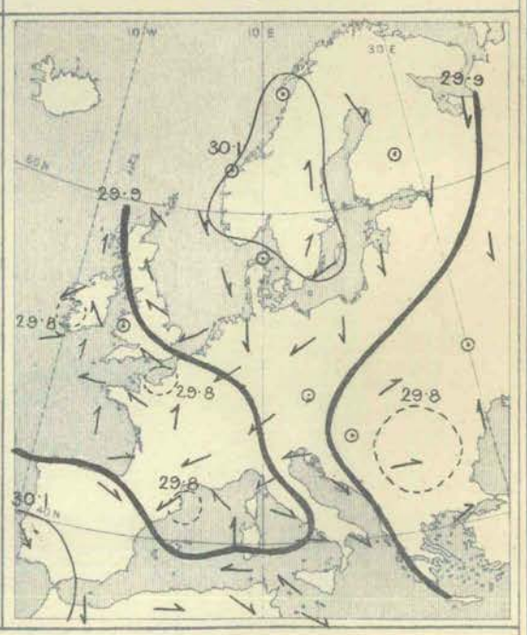
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright at almost all stations excepting those in Brittany and some parts of England, where sky was overcast; rain falling at Lorient and Brest; fog prevalent at Wick. Heavy rain later at several of the French stations, amounts reaching 5·5 ins. at Gap and 2·6 ins. at Perpignan. Slight showers at the North Foreland and on our north-west coasts, thunder and lightning in many places.

Temperature risen over central Europe. Morning readings highest, 82° at Sfax, 81° at Tunis, and 65° to 75° over the Mediterranean as a whole; exceeding 60° over western and central Europe. Lowest, 47° at Archangel, 40° at Bodö, 51° at Sumburgh Head, 52° at Aberdeen and Shields, 54° at St. Petersburg. Rising later to between 80° and 85° in several parts of England, France, and southern Europe, the highest readings of all being 88° at Florence, and 86° at Cagliari and Palermo.

Wind light to moderate in force—Northerly over Finland and Sweden, North-Easterly over north Germany, the Netherlands, and England, Easterly in the Channel, but Westerly to North-Westerly over the Spanish Peninsula, North-Westerly over Italy. Becoming Westerly in the south-west of France later. No important change occurring elsewhere.

Barometer highest, 30·2 ins. and more to 30·0 ins. in a large anticyclone of irregular form, spreading from Lapland over Scandinavia, the North Sea, and the Baltic, to Germany; 30·1 ins. to 30·0 ins. over Algeria and the south-western half of Spain. Lowest, 29·8 ins. and less at the mouth of the English Channel and also over the north of Russia. Shallow local depressions over several parts of France. Disturbances over France increasing later, and moving northwards towards England.

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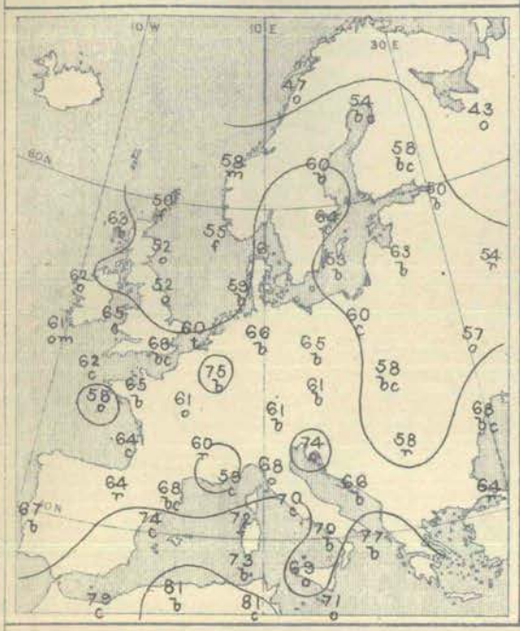
Thursday, 15th June.

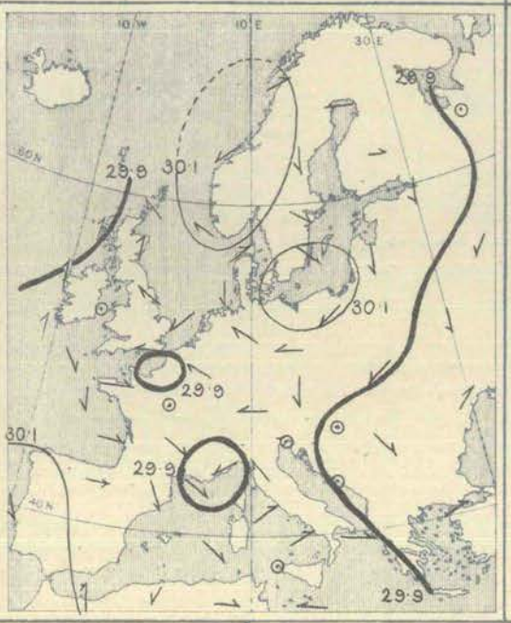
Temperature and Weather.

8 a.m.

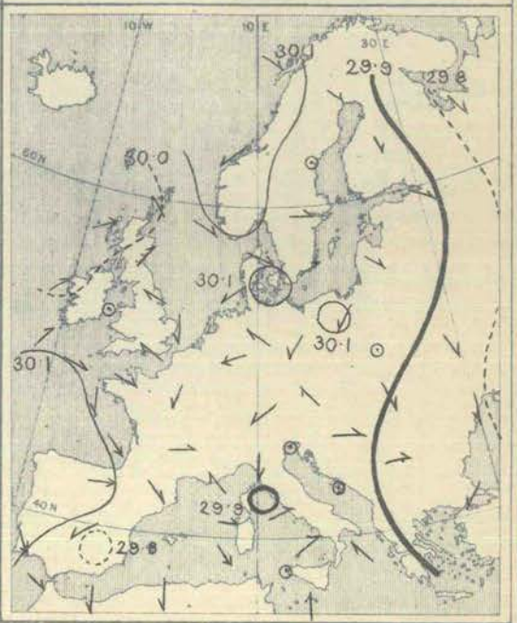


Barometer and Wind.

8 a.m.



6 p.m.



Weather fine and bright in most parts of the United Kingdom, as well as over northern and central Europe, Spain, southern Italy, and Algeria. Very cloudy over the greater part of France and northern Italy, with rain at Lyons, Biarritz, and Turin. Dull over south-eastern Europe, with rain at Moscow and Hermanstadt. Slight rain falling during day at one or two of our western and northern stations and thunder showers at Oxford. Larger quantities of rain occurring over the southern parts of France, and also over northern Italy and the south of Russia, with thunderstorms at Clermont and Rochefort.

Temperature risen over the northern parts of our Islands and the Continent, fallen in most other localities. Morning readings highest, 81° at Algiers, La Calle, and Sfax, 80° at Tunis, and 79° at Oran; above 70° over the Mediterranean generally, and above 65° over the south of England. Lowest, (1) 43° at Archangel, 47° at Bodö, 50° at St. Petersburg, and 53° at Uleaborg; (2) 50° at Sumburgh Head, and 52° at Aberdeen and Shields. Rising during day to 70° or more over the greater part of our Islands and France, to between 80° and 85° over the south-eastern counties of England and many parts of southern Europe, and to 93° at Palermo.

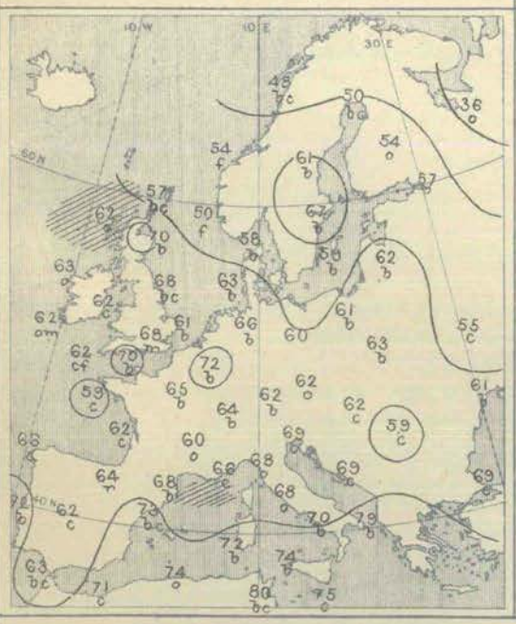
Wind light from the Southward over the greater part of Ireland and Scotland; North-Easterly over the eastern parts of England, Northerly or North-Westerly over our south-western counties and the north-west of France, Westerly in the south-west of France. Variable over Scandinavia and northern Russia, Northerly over central Russia, North-Easterly or Easterly in Germany. Variable in Austria, chiefly South-Westerly in Italy. Subsequently veering to the South-Westward in Ireland and Scotland, and becoming rather variable in the south-east of England; no decided change occurring elsewhere.

Barometer highest, 30·1 ins. and upwards in three separate areas—one lying over Norway, another over the Baltic and the south of Sweden, and the third over the western parts of the Spanish Peninsula. Lowest, 29·8 ins. and less over the Black Sea and the southern parts of Russia, 29·9 ins. and less in a large depression lying to the north-westward of our Islands, and also in three smaller systems lying (1) over the south-east of England and the north-east of France, (2) near Rochefort, and (3) over the Gulf of Genoa and its immediate neighbourhood. Depression off our north-west coasts subsequently moving northwards.

Friday, 16th June.

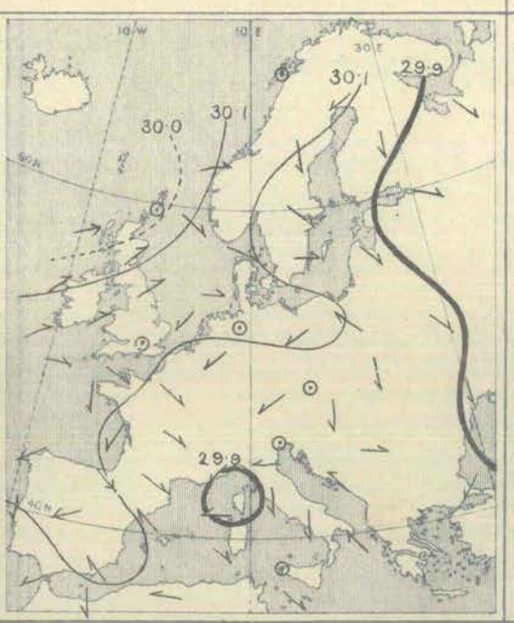
Temperature and Weather.

8 a.m.

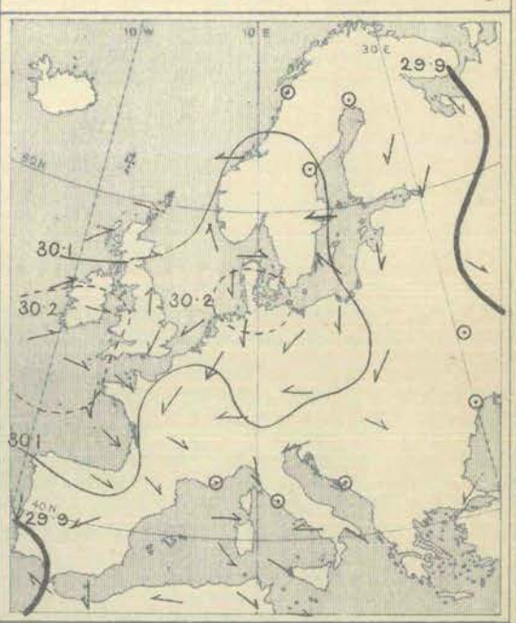


Barometer and Wind.

8 a.m.



6 p.m.



Weather fine over the greater part of the United Kingdom and the Continent, but foggy at the mouths of the English and Bristol Channels, as well as in the west of Norway. Dull in the extreme west and north-west of our Islands, with showers at Malin Head, dull also over the south of France and northern Italy. Slight rain falling later in the Hebrides and at some of the German stations, and larger quantities in the west of Norway and south of France; thunderstorms occurring at several of the western and southern French stations.

Temperature risen in most countries, but fallen in Norway and Russia, and also in Algeria. Morning readings highest, (1) 80° at Sfax, 79° at Brindisi, and 75° at Malta; (2) 70° at Wick, Aberdeen, Donaghadee, Liverpool, and Prawle Point. Lowest, 36° at Archangel, 48° at Bodö, 50° at Haparanda, Uleaborg, and Skudesnaes, and 54° at Kuopio and Christiansund. Rising during day to between 75° and 80° in the east of Scotland, and to between 80° and 85° over the inland parts of England. Exceeding 80° also at many of the Continental stations, the highest reading of all being 90° at San Fernando and 88° at Lisbon.

Wind South-Westerly in Ireland, Scotland, and the west of Norway, and strong in force in the Hebrides. Light from the North-East over Germany, the Netherlands, and the east and south-east of England, and from the North-Westward over the south-west of England and the greater part of France. Northerly or North-Westerly over Sweden and Russia, variable in Italy. Easterly or North-Easterly in Spain. No important change occurring during day.

Barometer highest, 30·2 ins. and upwards in an anticyclone lying to the south-westward of our Islands; 30·1 ins. and upwards over the greater part of western and north-western Europe, but below 30·0 ins. in a large shallow depression lying to the northward of our Islands. Lowest, 29·8 ins. and less over the southern parts of Russia; 29·9 ins. and less in a shallow depression lying over the Gulf of Genoa. Depression in north subsequently travelling away to the north-eastward, anticyclone in south-west spreading northwards over Ireland and the west of England.

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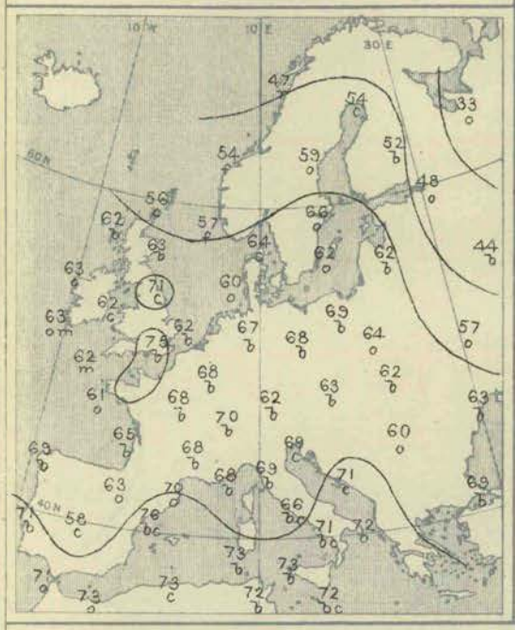
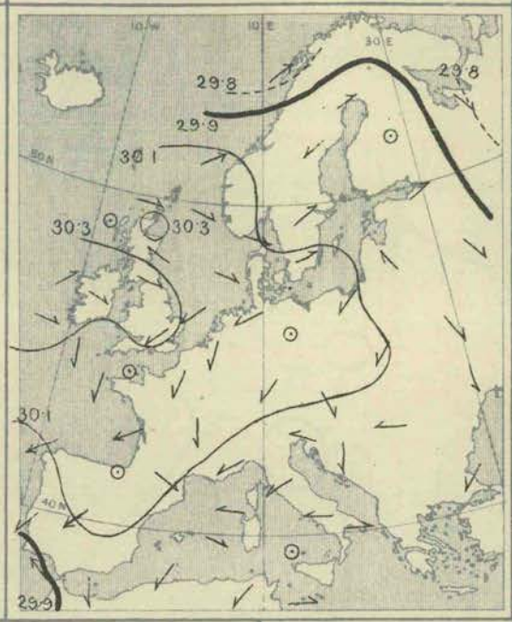
Saturday, 17th June.

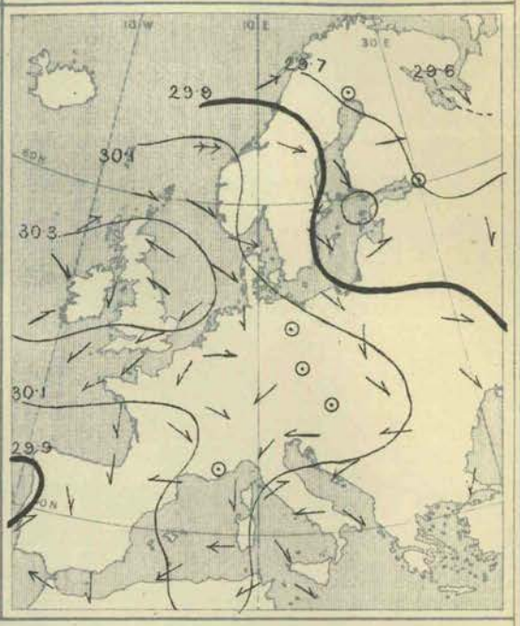
Temperature and Weather. — 8 a.m.



Barometer and Wind. — 8 a.m.



Barometer and Wind. — 6 p.m.



Weather fine over the greater part of western, central, and southern Europe, but dull in Ireland, with fog at the northern stations. Dull in Scandinavia and the extreme north of Russia, with fog in the west of Norway and with rain at Bodö. Rain falling later in the western and northern parts of Scandinavia generally, and a slight quantity in the Shetlands; thunderstorms occurring at many of the western French stations.

Temperature risen in most places. Morning readings highest, (1) 78° at Sfax, 76° at Barcelona, and 73° at Cagliari, Palermo, Nemours, and Algiers; (2) 75° in London, 73° at Jersey, 72° at Pembroke, and 71° at Shields, above 65° in most parts of western and southern Europe. Lowest, 33° at Archangel, 44° at Moscow, 47° at Bodö, 48° at St. Petersburg, and 52° at Kuopio. Rising during day to between 80° and 85° in many parts of Great Britain, and reaching 87° in London and at Cambridge. Remaining below 80° at many of the Spanish and Italian stations, but rising to 89° at Madrid.

Wind light and variable over the northern parts of the United Kingdom, but North-Easterly on our southern coasts, as well as over the Netherlands, France, Spain, and the greater part of Italy. South-Westerly in Scandinavia, and strong in force in the west of Norway; light from the North-Westward in many parts of Russia and central Europe. Westerly and South-Westerly breezes setting in later over the greater part of Scotland; no important change occurring elsewhere, but wind increasing to a gale from the westward at Christiansund.

Barometer highest, 30·2 ins. to 30·3 ins. and upwards in a large anticyclone covering our Islands, the North Sea, Denmark, Germany, the Netherlands, and the north of France. Lowest, 29·8 ins. and less in a well-marked depression lying off the north-west of Norway, and also in a shallower system over northern Russia; 29·9 ins. and less in a third disturbance lying off the south-west of Spain. Very little change occurring during day, but depression off north-west of Norway spreading south-eastwards.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are show by arrows, which are drawn flying *with the wind*, the force is indicated thus: ⟹ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breese: and ⊙ = a calm. In the left-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds: o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Germany, Sweden, and Norway, and 7 a.m. in France, Algeria, Italy, Austria, and Russia; that for 6 p.m. is prepared from observations made at 6 p.m. in the British Islands and France, 7 p.m. in Algeria, 8 p.m. in Sweden and Norway, Germany, and Austria, and 9 p.m. in Russia, Belgium, and Italy. The time indicated in each case is the standard time for each country.

GENERAL NOTES.

At the commencement of the week a large anticyclone covered the whole of north-western and a considerable portion of central Europe, so that fair dry weather prevailed generally. A complex low pressure system was, however, soon developed over Spain, France, and the western parts of the Mediterranean, and between the 12th and 14th, when this spread northwards, thunderstorms and rain occurred in many parts of western Europe. In our Islands the rainfall was mostly very slight, and in some instances the thunder and lightning were unattended by any precipitation whatever. In France, however, some heavy falls were reported, especially on the 14th. On the 15th the low pressure system gradually filled up, and during the remainder of the week the conditions again became anticyclonic over nearly the whole of Europe, the central portion of the high-pressure area being found directly over our Islands. The temperatures registered over the United Kingdom during the three concluding days were exceedingly high, the daily maxima being above 80° in many parts of Ireland and Scotland, and above 85° over the inland parts of England.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 140.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	74·5	?	62	?	EASTBOURNE	77·7	?	68	?
OSWALDKIRK (Yorkshire)	59·1	?	50	?	TENBY	69·2*	?	60*	?
WORKSOP	53·1	−13·4	46	+15	NEWQUAY	62·2	?	55	?
THURCASTON (Leicestershire)	54·5	+17·1	47	+15	TORQUAY	74·5*	?	66*	?
MARGATE	63·5	?	56	?	ARLEY COTTAGE (County Cavan)	42·1	?	36	?
WESTBOURNE (Sussex)	75·0 *	?	66*	?	GUERNSEY	81·2*	?	72*	?
BRIGHTON	71·2	?	62	?					

* The values at Westbourne, Tenby, Torquay and Guernsey are obtained by Jordan's Photographic Recorder.

Judd & Co. Lith. 63 Carter Lane.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W. R. H. SCOTT, F.R.S., SECRETARY.

By whom Subscriptions, payable in advance, can be received.

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VOL. X. No. 25.] *Third Series.* WEEK ENDING SATURDAY, 24TH JUNE, 1893. [*Price 6d.* [*Annual Subscription, post paid*, £1 10*s.* 0*d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871-90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the twenty-five years 1866-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90 only BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the ten years 1881-90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

	DISTRICTS. (See p. 140.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 1st, 1893. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	79	42	59·2	48·3	53·4	0 (average)	80	+15	0	− 1	914	+341	485	− 57
	1. SCOTLAND, EAST	90	42	64·3	49·1	56·2	1 above.	99	+13	0	0	1038	+260	548	− 21
	2. ENGLAND, N.E.	86	45	64·9	51·7	57·9	2 above.	111	+19	0	0	1056	+279	436	− 62
	3. ENGLAND, EAST	88	45	68·7	51·4	59·5	1 above.	123	+18	0	0	1299	+343	524	− 37
	4. MIDLAND COUNTIES	87	43	69·9	51·5	60·0	2 above.	126	+21	0	0	1427	+445	505	− 47
	5. ENGLAND, SOUTH	91	44	70·7	53·3	61·4	3 above.	136	+24	0	0	1449	+387	373	− 43
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	81	39	63·9	49·2	56·0	1 above.	98	+ 9	0	0	1161	+353	354	− 63
	7. ENGLAND, N.W.	85	44	65·4	52·4	58·5	2 above.	116	+19	0	0	1293	+436	323	− 91
	8. ENGLAND, S.W.	90	41	70·9	53·3	61·5	4 above.	137	+33	0	0	1496	+486	246	− 70
	9. IRELAND, NORTH	81	43	64·1	51·1	57·2	1 above.	106	+14	0	0	1295	+373	258	−104
	10. IRELAND, SOUTH	81	44	68·2	51·8	59·5	2 above.	123	+21	0	0	1495	+422	178	−100
	—CHANNEL ISLANDS	84	52	69·5	57·0	62·8	4 above.	146	+38	0	0	1680	+554	70	− 52

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 140.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the mean for the Week.	From Jan. 1st, 1893. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 1st, 1893. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of ins.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	4	5	3 less.	103	−11	18·0	− 3·4	24	− 20	20	−15	583	− 46	27	− 2
	1. SCOTLAND, EAST	4	15	10 more.	83	− 8	10·3	− 3·0	29	− 16	24	−13	727	+ 22	33	+ 1
	2. ENGLAND, N.E.	4	6	1 more.	69	−16	7·6	− 3·2	29	− 9	25	− 7	809	+181	37	+ 8
	3. ENGLAND, EAST	5	5	0 (average)	69	−15	7·1	− 3·6	43	− 5	37	− 3	969	+212	44	+ 9
	4. MIDLAND COUNTIES	3	4	1 less.	68	−14	7·5	− 4·7	45	+ 3	38	+ 3	906	+242	42	+ 11
	5. ENGLAND, SOUTH	3	4	1 less.	64	−17	7·4	− 4·5	50	+ 3	44	+ 3	998	+288	46	+ 13
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	2	5	2 less.	83	−14	14·7	− 7·2	49	+ 6	41	+ 4	811	+120	37	+ 5
	7. ENGLAND, N.W.	3	6	0 (average)	72	−17	9·7	− 4·1	34	− 7	29	− 5	814	+135	37	+ 6
	8. ENGLAND, S.W.	3	3	3 less.	67	−25	11·1	− 6·0	76	+ 28	67	+24	1078	+281	50	+ 13
	9. IRELAND, NORTH	3	2	4 less.	88*	−15	11·6	− 3·8	48	+ 11	41	+ 9	668	− 3	31	0
	10. IRELAND, SOUTH	3	2	4 less.	76	−21	12·3	− 5·3	57	+ 15	49	+14	781	+ 21	36	+ 1
	—CHANNEL ISLANDS	1	1	4 less.	70	−29	8·9	− 5·2	87	+ 31	77	+28	1236	+316	57	+ 15

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather continued fine and dry generally during the earlier part of the period, but some thunder and lightning, accompanied by slight local rain, occurred at some south-eastern and southern stations. After the middle of the week, however, the conditions became unsettled and rainy at nearly all stations, the fall experienced in the east of Scotland being decidedly heavy.

Temperature was considerably above the mean during the early days, but fell very suddenly during the night of the 19th to 20th, and became somewhat low for the time of year. The average values for the whole week just equalled the normal in the north of Scotland, and slightly exceeded it in most other districts; in England S.W. and the Channel Islands, however, the excess amounted to 4°. The highest of the maxima occurred on the 18th in very high generally, ranging from 91° in England S., and 90° in England S.W. and Scotland E., to 81° in Scotland W. and over Ireland, and to 79° in Scotland N. The lowest of the minima were recorded either on the 23rd or 24th, and ranged from 39° in Scotland W., and 41° in England S.W., to 45° in England E. and N.E., and to 52° in the Channel Islands.

Rainfall greatly exceeded the mean in Scotland E., and just equalled it in England E. and N.W.; in all other districts there was again a deficit, although the amount recorded over our south-eastern and central counties was more considerable than any experienced in those localities for many weeks past.

Bright Sunshine again exceeded the mean in Ireland and the greater part of England, but was below it in the north and east of Scotland and the northern and north-eastern parts of England. The percentage of the possible duration ranged from 77 in the Channel Islands, and 67 in England S.W., to 49 in Ireland S., 44 in England S., and to 20 in Scotland N.

Barometer and Wind.—At the commencement of the week the distribution of pressure was anticyclonic, with Westerly winds in the north and Easterly winds in the south. By the 20th, the anticyclone had moved westwards to the Atlantic, and some small shallow depressions were found in different parts of our Islands. During the latter part of the week a well-marked depression of increasing area and intensity moved southwards from the north of Scotland to the north-east of England, and subsequently in an easterly and north-easterly direction over the North Sea. This system caused Easterly winds in the north, fresh or strong Northerly winds in the west, and moderate winds from the Westward in the south.

* This value has been altered slightly owing to the receipt of additional information for a preceding week.

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II.—DATA from which the SUMMARY on page 145 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°				Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	58	44	53·7	46·6	49·9	− 0·4	55	0	4	0·10	−0·38	*	*	*	*
	Stornoway	76	45	58·7	49·0	53·5	+ 1·0	81	0	5	0·68	−0·02	21·4	−19·5	17	−15
	Wick	74	42	58·7	47·3	52·7	− 0·1	75	0	6	0·35	−0·07	*	*	*	*
	Lairg Ⓢ												*	*	*	*
	Glencarron Ⓢ	73	43	59·2	47·6	53·0	+ 0·3	77	0	5	0·60	−0·64	*	*	*	*
	Fort Augustus Ⓢ	79	46	64·3	50·3	56·8	+ 1·9	104	0	4	0·37	−0·20	2)·6	?	17	?
	Fort William Ⓢ	70	45	60·7	49·1	54·5	− 0·9	88	0	2	0·62	−0·36	31·2	?	25	?
1. SCOTLAND, E.	Nairn	83	46	63·4	50·7	56·6	+ 0·9	102	0	5	1·00	+0·58	*	*	*	*
	Aberdeen	72	47	59·9	51·1	55·2	+ 0·4	92	0	5	2·35	+1·93	27·8	−16·6	23	−13
	Braemar Ⓢ	83	43	60·9	46·4	53·2	+ 0·3	78	0	4	1·28	+0·69	30·5†	?†	25†	?†
	Ochtertyre Ⓢ	90	42	70·4	46·3	57·4	+ 2·0	108	0	2	1·22	+0·57	*	*	*	*
	Leith Ⓢ	83	47	67·0	51·0	58·4	+ 2·0	115	0	2	1·28	+0·82	*	*	*	*
	Marchmont Ⓢ	84	42	64·4	49·1	56·2	+ 1·6	99	0	3	1·98	+1·36	28·8	?	24	?
2. ENGLAND, N.E.	Alnwick Castle	75	46	64·3	50·9	57·1	+ 2·6	106	0	4	0·87	+0·38	*	*	*	*
	Durham	86	45	66·9	50·0	57·9	+ 1·5	111	0	4	0·38	−0·09	28·5	− 8·5	24	− 7
	Shields	75	47	63·1	51·3	56·8	+ 1·2	104	0	4	0·65	+0·23	*	*	*	*
	Scarborough Ⓜ	79	49	64·5	52·8	58·2	+ 1·7	113	0	4	0·79	+0·31	*	*	*	*
	York	85	50	68·6	52·3	59·9	+ 2·1	125	0	4	0·51	−0·01	29·0	− 9·7	25	− 7
	Spurn Head	70	51	62·0	53·0	57·2	+ 0·5	106	0	3	0·20	−0·15	*	*	*	*
3. ENGLAND, E.	Hillington Ⓜ	86	48	69·8	51·2	59·9	+ 1·9	125	0	4	0·54	+0·02	40·6	− 3·0	35	− 4
	Yarmouth	68	50	62·9	53·6	57·9	+ 0·5	111	0	5	0·51	+0·03	*	*	*	*
	Geldeston	83	45	67·9	49·9	58·3	+ 0·6	114	0	5	0·45	+0·05	48·2	+ 0·2	42	0
	Cambridge	88	48	72·6	51·4	61·3	+ 2·2	135	0	5	0·74	+0·21	41·0	− 2·8	35	− 3
	Rothamsted	86	47	70·4	50·9	60·0	+ 2·0	126	0	4	0·42	−0·13	41·1	?	35	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	87	43	70·4	49·6	59·1	+ 1·0	120	0	4	0·35	−0·18	*	*	*	*
	Loughborough	86	48	71·3	52·1	61·0	+ 1·6	133	0	2	0·38	−0·14	*	*	*	*
	Stamford (Ketton Hall)	87	48	71·4	51·3	60·7	+ 1·6	131	0	3	0·36	−0·12	*	*	*	*
	Cheadle Ⓜ	81	45	65·5	51·3	57·9	+ 2·2	111	0	4	0·59	−0·09	*	*	*	*
	Churchstoke Ⓜ	81	45	68·4	49·4	58·2	+ 2·2	113	0	3	0·38	−0·13	53·0	+12·2	45	+ 9
	Hereford Ⓜ	83	48	70·8	52·3	60·9	+ 2·5	132	0	3	0·39	−0·11	*	*	*	*
	Cirencester	85	47	70·7	52·1	60·8	+ 3·8	132	0	3	0·56	−0·01	48·0	+ 5·8	41	+ 4
	Oxford	86	49	70·6	53·9	61·7	+ 3·2	138	0	4	0·30	−0·22	45·9	+ 3·0	40	+ 2
5. ENGLAND, S.	London	88	49	72·4	53·0	62·0	+ 1·7	140	0	3	0·40	−0·11	39·8†	+ 0·8†	34†	0†
	North Foreland	72	49	65·3	53·6	59·0	+ 1·4	119	0	4	0·51	?	*	*	*	*
	Strathfield Turgiss Ⓜ	90	44	73·2	48·5	60·0	+ 0·9	126	0	4	0·26	−0·22	*	*	*	*
	Dungeness	72	47	67·0	54·6	60·4	+ 1·7	129	0	4	0·15	−0·23	*	*	*	*
	Hastings (St. Leonards)	82	49	70·4	54·0	61·6	+ 2·9	137	0	4	0·39	−0·01	55·6	+ 5·9	49	+ 5
	Southampton	91	50	74·6	53·7	63·3	+ 3·7	149	0	3	0·24	−0·17	51·9	+ 5·1	46	+ 4
	Hurst Castle	84	50	71·1	55·9	63·0	+ 4·3	147	0	2	0·03	−0·44	*	*	*	*
	Stowell Ⓜ	86	48	71·6	53·4	61·9	+ 3·8	139	0	3	0·78	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	66	41	60·7	47·8	53·8	− 1·6	83	0	3	0·08	−1·10	*	*	*	*
	Glasgow	80	46	64·9	50·8	57·4	+ 1·8	108	0	2	0·63	−0·04	37·7	+ 0·9	31	0
	Ardrossan	72	46	62·7	49·0	55·4	− 0·9	94	0	2	0·49	−0·10	*	*	*	*
	Glenlee Ⓢ	81	39	66·8	48·8	57·2	+ 2·5	106	0	2	0·57	−0·21	*	*	*	*
	Douglas (Isle of Man)	76	47	64·5	49·4	56·4	+ 0·9	101	0	2	0·79	+0·27	59·7	+ 9·9	51	+ 8
7. ENGLAND, N.W.	Newton Reigny	85	44	69·9	50·0	59·3	+ 4·2	121	0	3	0·81	+0·29	30·0	−13·8	25	−11
	Stonyhurst	82	48	65·8	52·4	58·6	+ 2·1	116	0	3	0·78	−0·03	27·8	−14·0	24	−12
	Blackpool Ⓜ	80	51	65·6	54·1	59·5	+ 2·8	123	0	2	0·48	−0·02	38·5	− 4·4	33	− 3
	Manchester	84	46	65·1	51·6	57·9	+ 1·0	111	0	3	0.56	−0·15	25·2†	?	22†	?
	Liverpool Obsy. (Bidston)	85	50	65·9	54·1	59·6	+ 1·6	123	0	3	0·72	+0·22	*	*	*	*
	Llandudno Ⓜ	74	49	64·4	52·8	58·2	+ 0·3	113	0	2	0·54	+0·12	48·6	+ 8·3	42	+ 7
	Holyhead	64	49	60·9	52·0	56·1	− 0·8	99	0	3	0·21	−0·26	*	*	*	*
8. ENGLAND, S.W.	Llandovery	88	41	73·7	48·6	60·3	+ 2·3	128	0	3	0·63	−0·08	*	*	*	*
	Pembroke	79	50	65·7	55·0	60·0	+ 3·5	126	0	1	0·01	−0·46	66·2	+12·5	57	+10
	Bristol (Montpelier)	90	51	74·5	55·9	64·6	+ 5·1	158	0	4	0·60	?	*	*	*	*
	Arlington (N. Devon)	84	46	69·4	50·1	59·1	+ 2·9	120	0	2	0·38	−0·44	*	*	*	*
	Cullompton Ⓜ	89	45	74·2	49·8	61·2	+ 3·1	134	0	2	0·22	−0·36	69·2	+25·2	61	+22
	Falmouth	80	51	68·8	54·9	61·4	+ 3·5	136	0	3	0·27	−0·35	91·0	+38·5	81	+34
	Plymouth	85	51	72·0	55·5	63·2	+ 3·6	148	0	3	0·17	−0·22	81·3	+34·8	72	+30
	Prawle Point	76	51	69·1	56·4	62·3	+ 5·8	142	0	2	0·11	−0·28	*	*	*	*
9. IRELAND, N.	Malin Head	65	49	58·9	53·1	55·8	+ 0·1	97	0	4	0·10	?	*	*	*	*
	Londonderry	81	47	65·8	51·0	57·9	+ 0·8	111	0	2	0·13	−0·48	*	*	*	*
	Edenfel (Omagh)	79	46	64·6	50·4	57·0	+ 0·8	105	0	3	0·28	−0·34	*	*	*	*
	Belmullet	73	49	62·3	53·1	57·4	+ 1·7	108	0	4	0·54	?	*	*	*	*
	Markree Castle	75	44	63·6	50·2	56·4	+ 1·2	101	0	3	0·31	−0·46	59·0	+24·0	50	+20
	Brookeborough	80	46	66·3	49·7	57·4	+ 2·0	108	0	3	0·31	−0·39	*	*	*	*
	Armagh	78	43	65·2	48·5	56·3	0·0	100	0	2	0·11	−0·41	38·4	− 0·1	33	0
	Donaghadee	68	49	63·6	54·9	59·0	+ 3·3	119	0	2	0·10	−0·38	*	*	*	*
	Edgeworthstown	81	44	66·5	49·4	57·4	+ 1·5	108	0	3	0·17	−0·54	*	*	*	*
10. IRELAND, S.	Dublin	75	47	65·8	53·2	59·1	+ 0·8	120	0	3	0·31	−0·12	52·4	+11·1	45	+10
	Parsonstown	80	44	67·7	48·9	57·7	+ 1·1	110	0	3	0·50	−0·08	43·9	+ 4·4	35	+ 4
	Kilkenny	81	46	67·7	51·6	59·1	+ 2·0	120	0	3	0·19	−0·32	*	*	*	*
	Waterford	81	46	71·1	51·8	60·8	+ 2·9	132	0	2	0·13	−0·45	*	*	*	*
	Roche's Point	73	50	67·9	54·9	61·0	+ 2·8	133	0	0	—	−0·72	*	*	*	*
	Valencia	80	48	67·7	52·1	59·4	+ 2·4	122	0	4	0·38	−0·42	73·4	+29·1	63	+24
	Killarney	81	44	69·1	49·8	58·8	+ 2·4	118	0	3	0·29	?	*	*	*	*
	Foynes	80	50	68·6	52·4	59·9	+ 3·0	125	0	4	0·09	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	75	52	67·0	55·9	61·1	+ 3·4	134	0	2	0·18	−0·28	*	*	*	*
	Jersey	84	54	72·0	58·0	64·5	+ 5·1	158	0	1	0·02	−0·45	85·4	+31·6	76	+28

Stations marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

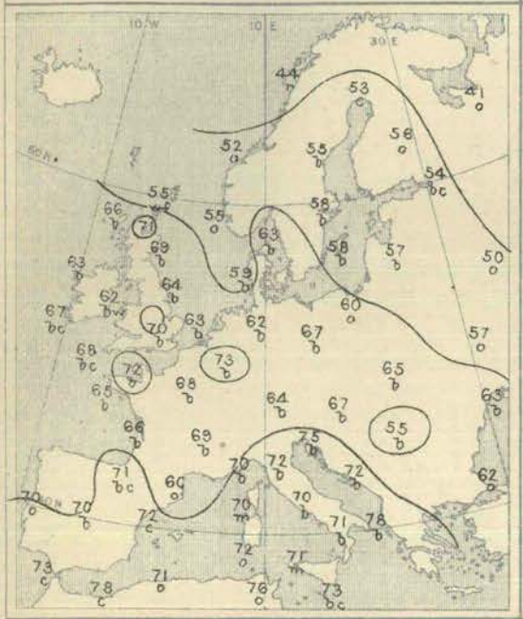
* An asterisk is inserted in all places for which the information is not usually received.

† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row) at the Kew Observatory, and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

Sunday, 18th June.

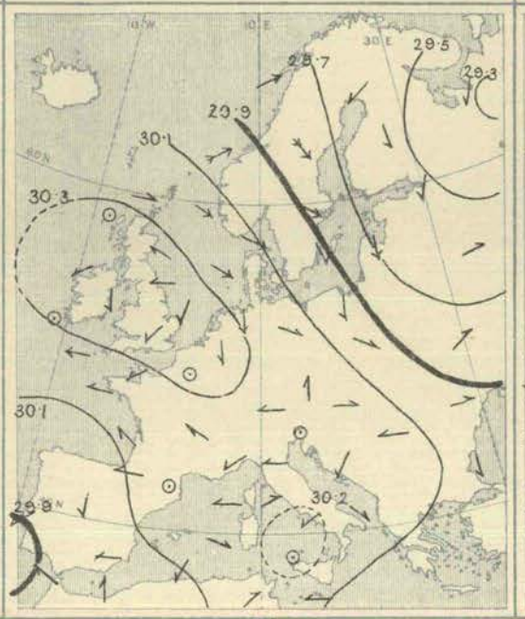
Temperature and Weather.

8 a.m.

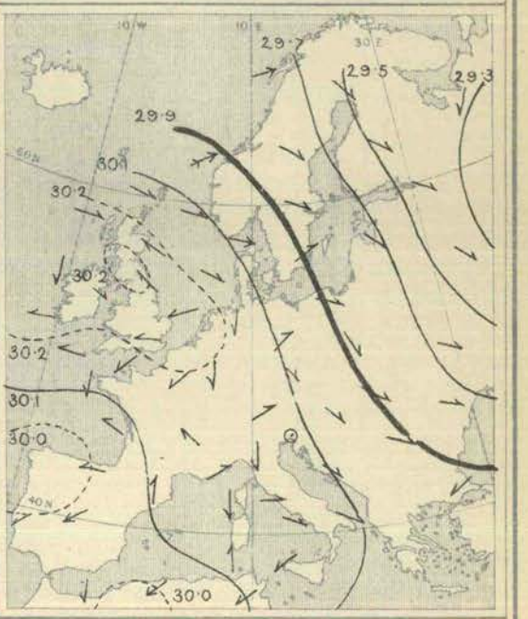


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning fine and bright over our Islands and the greater part of the Continent, dull in the west of Norway (with rain at Bodö) and over a considerable portion of Russia, Spain, and Algeria. Slight rain later in the extreme north of Scotland, and thunderstorms at Valencia (Ireland), Biarritz, and Madrid, considerable falls in various parts of Russia. Remaining fine and dry over western Europe generally.

Temperature fallen in the central parts of the United Kingdom, as well as over Denmark and the Baltic, but risen in most other localities. Morning readings highest, (1) 78° at Brindisi, Oran, and Sfax, 76° at La Calle, and 75° at Tunis; (2) 72° at Leith and Liverpool, 71° at Wick, and 70° at Loughborough, Roche's Point, and Prawle Point, above 65° in most parts of the United Kingdom. Lowest, 41° at Archangel, 44° at Bodö, 50° at Moscow, 52° at Christiansund. Rising later to between 80° and 85° in many parts of our Islands, reaching 86° at Loughborough and Cambridge. Exceeding 85° at most French stations; highest of all, 91° at Brest and Rochefort.

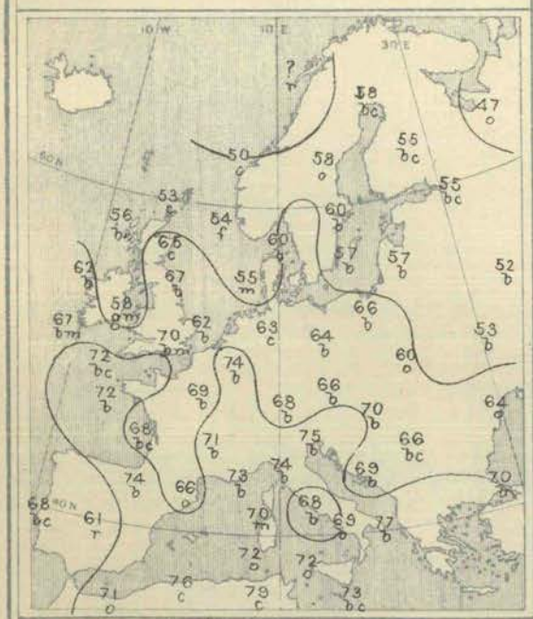
Wind light to moderate from the Eastward or North-Eastward over England, Ireland, France, and Spain, variable in Italy, South-Easterly or Southerly in Algeria. Light and variable in Scotland; strong to a gale from the Westward or South-Westward in the west of Norway, and from the North-Westward in Sweden and Denmark, moderate to fresh from the North-Westward or Northward over Finland, the Baltic, and Poland; Westerly in Austria, South-Westerly over the southern parts of Russia. No important change occurring over western Europe during day.

Barometer highest, 30·3 ins. and upwards in an anticyclone covering nearly the whole of our Islands, the Netherlands, and the North Sea. Lowest, 29·3 ins. and less in a depression lying over the north of Russia; 29·9 ins. and less in a shallow system lying off the south-west of Spain. General fall of barometer taking place over western Europe during day, and a decided fall over Russia. Depression over northern Russia spreading southwards.

Monday, 19th June.

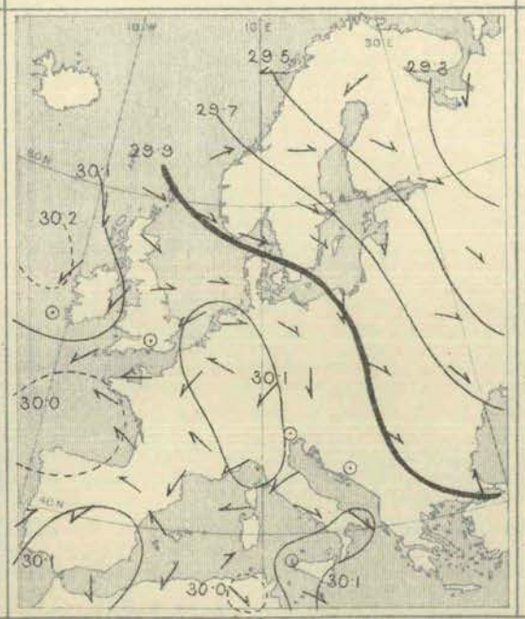
Temperature and Weather.

8 a.m.

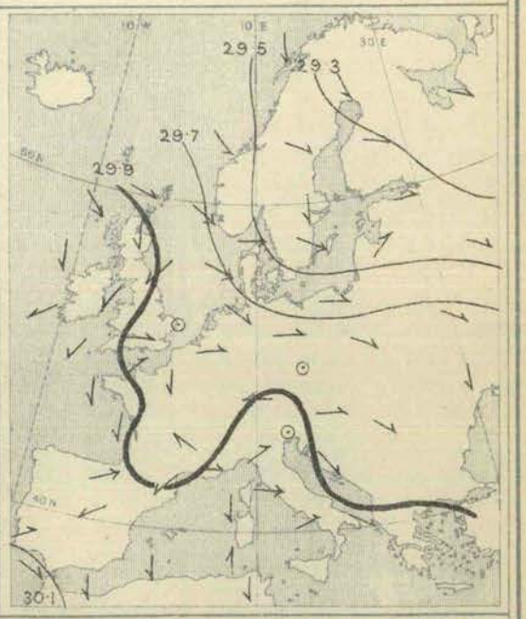


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning still fine, bright, and very warm over the eastern, southern, and south-western parts of England and Ireland, as well as over central and southern Europe; dull over Scandinavia, with rain in several places, cloudy and changeable over Scotland, the north of Ireland, and the Irish Sea. Some rain later over Sweden, and the north and east of our Islands, slight falls at the Channel stations, and a considerable amount at Limoges. Sharp thunderstorms in many southern localities. [Newspapers report them in west also with heavy rain and hail.]

Temperature beginning to give way decidedly in Scotland and the north of Ireland. Morning readings highest, 70° to 77° over many parts of the Mediterranean and southern Europe, 70° or rather more over several parts of England and the south-east of Ireland, and exceeding 60° over Ireland, England, and central Europe generally. Lowest, 47° at Archangel, 50° at Christiansund, 53° at Sumburgh Head, and 56° at Stornoway. Rising to between 80° and 88° over England later, to 90° or more in some parts of France, but decided fall in north spreading steadily in a southerly direction.

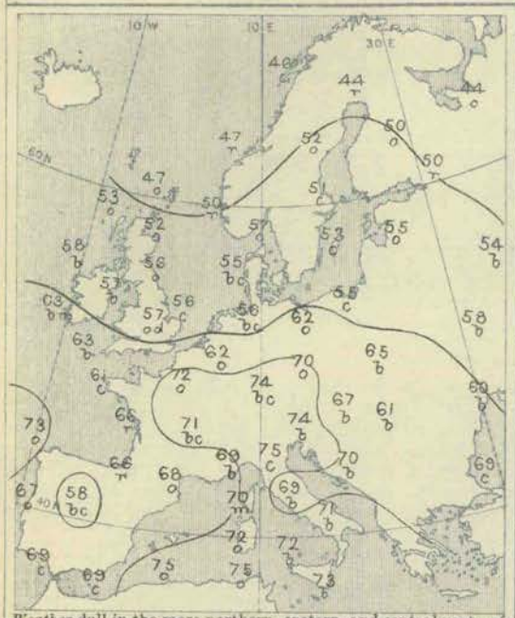
Wind North-Westerly over the whole of eastern and many parts of central and northern Europe, and moderate in force; Northerly to Westerly and variable over our Islands, North-Easterly to Easterly in the south and over the Channel, Easterly to South-Easterly over the Bay of Biscay. Very variable on the Mediterranean coasts. Becoming very variable over France and the south of our Islands later, but Northerly breeze spreading gradually to the southward over the United Kingdom and North Sea, and blowing strongly in gusts during some thunderstorms.

Barometer highest, 30·2 ins. and more to 30·1 ins. over the western parts of our Islands, and exceeding 30·1 ins. over the Netherlands, north Germany, and the east of France, as well as in the south of Italy and Sicily. Lowest, (1) about 29·2 ins. over the north of Russia, and below 29·5 ins. over nearly the whole of that country; (2) 30·0 ins. and less over the Bay of Biscay. Gradients slight over England, France, and western Germany, moderate elsewhere. Falling in western Europe later (most in France and the south-east of England), local disturbances being developed in latter districts.

Judd & Co. Lith. 63, Carter Lane.

Tuesday, 20th June.

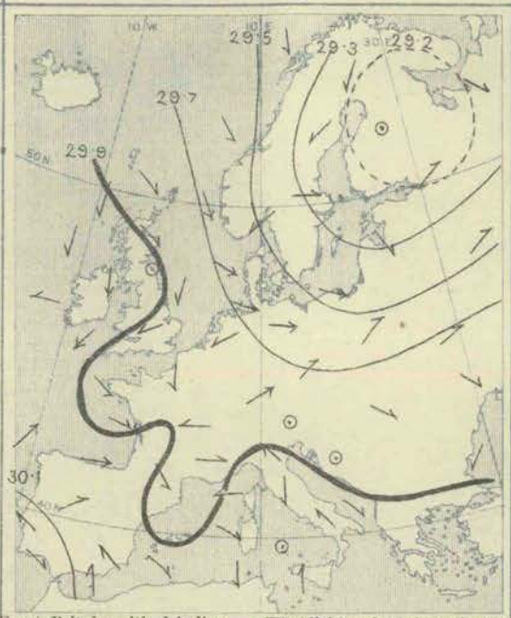
Temperature and Weather. — 8 a.m.

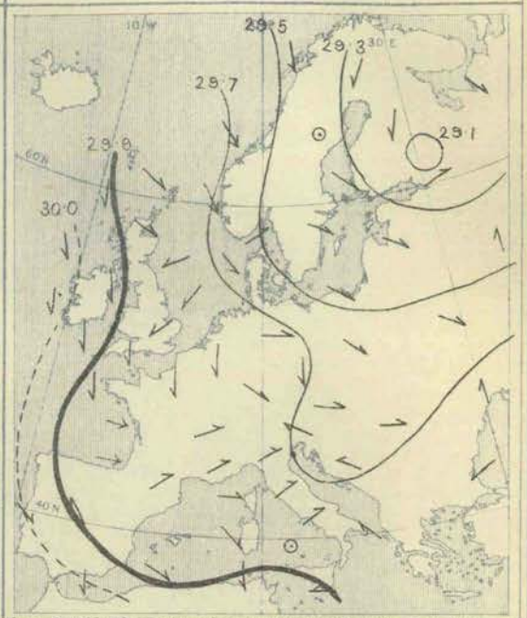


Weather dull in the more northern, eastern, and central parts of Great Britain, with drizzling rain in London and at Oxford; rainy in the south-west of France and also in the west of Norway; dull over Germany and the western and northern parts of Russia. Fine and bright in the west and south-west of our Islands, as well as over the greater part of southern and eastern Europe. Slight rain falling later at one or two English stations, and larger amounts in Scandinavia; thunderstorms occurring in France, with heavy rain at Paris, La Coubre, and the Puy de Dôme. Considerable rain over Austria, also at Cagliari and Berne.

Temperature fallen fast in most of the western and northern countries, as well as in Austria, but risen elsewhere. Morning readings highest, 79° at Barcelona, 77° at Sfax, and 76° at Brindisi, above 70° in many parts of central and southern Europe. Lowest, 44° at Archangel and Haparanda, 46° at Bodö, and 47° at Christiansund and Sumburgh Head; below 55° over the extreme northern parts of our Islands and the Continent generally. Daily maxima over our Islands below 70° at all but the south-western stations, and below 60° in several parts of our northern districts. Thermometer exceeding 80° over central France and in Italy, and reaching 91° at Belfort.

Barometer and Wind.



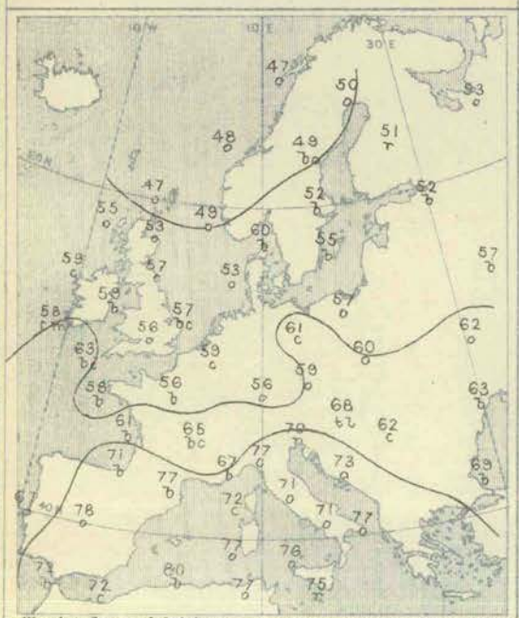


Wind light to fresh from the Northward or North-Westward over the greater part of western and northern Europe, but Easterly or North-Easterly at many of the English stations. Fresh from the Westward over north Germany, light from the South-Westward over the southern and eastern parts of Germany and the central parts of Russia. Variable in Italy, South-Easterly in Algeria and the south of Spain. Subsequently increasing to a gale from the Northward in the south-west of Norway; no important change occurring elsewhere.

Barometer highest, 30·1 ins. and upwards in the south of Spain; 30·0 ins. and upwards in a large anticyclone lying over the Atlantic and spreading eastwards over Ireland and a considerable portion of the Iberian Peninsula. Lowest, 29·2 ins. and less in a large depression over Finland and Lapland. Barometer falling slowly over western Europe during day, and depression over east of France becoming well-marked. No other change occurring in general distribution of pressure.

Wednesday, 21st June.

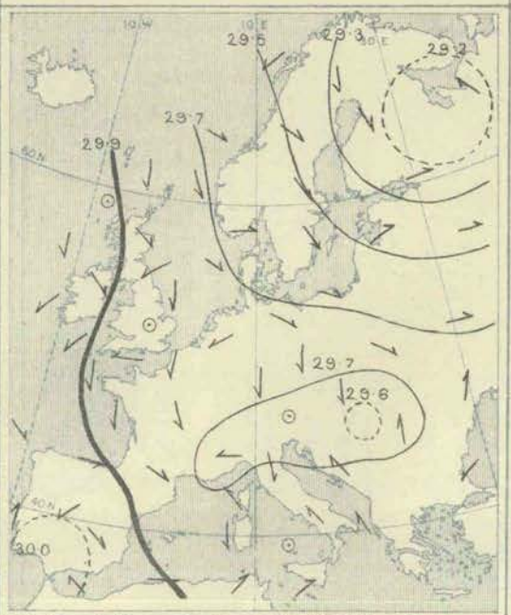
Temperature and Weather. — 8 a.m.

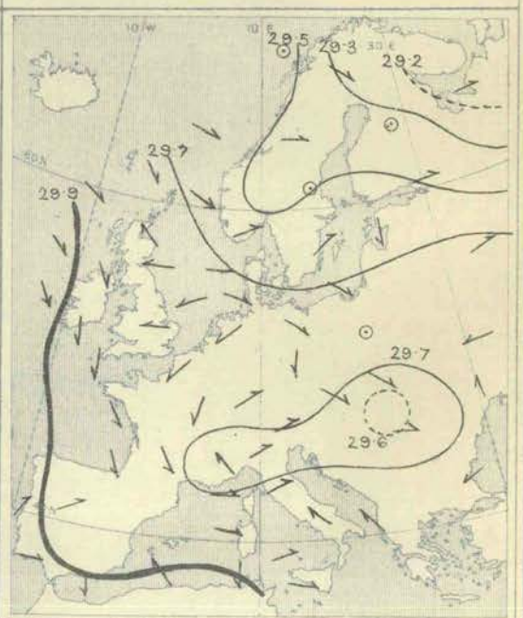


Weather fine and bright at many of our own western stations, as well as over France, Spain, Sweden, the Baltic, Austria, and the south of Russia. Dull elsewhere, with drizzle at Oxford, and with steady rain at Kuopio, Cracow, Lemberg, and Munich. Showers falling later in the south-east of England, with thunder at the North Foreland; rain setting in over the north of Scotland at night, and spreading southwards. Considerable falls in many parts of southern and south-eastern Europe.

Temperature fallen quickly in Germany, but changed irregularly elsewhere. Morning readings highest, 78° at Brindisi and Sfax, 76° at Barcelona, and 75° at Leghorn, Algiers, La Calle, and Malta, above 70° at most of the Mediterranean and Adriatic stations. Lowest, 47° at Bodö and Sumburgh Head, and 48° at Archangel, Kuopio, and Christiansund, below 55° over northern Europe generally, and also in the north of Scotland. Rising during day to between 65° and 69° over the inland parts of England, and reaching 72° at Jersey. Exceeding 70° at most of the French stations, touching 90° in the southern parts of Austria and Italy, and 97° at Laghouat.

Barometer and Wind.





Wind light to moderate from the Northward or North-Westward in the west and north of our Islands, as well as in France, Germany, Denmark, and Scandinavia, but Southerly over the central and southern parts of England. Light from the Westward or South-Westward over the southern parts of Russia, variable in Spain and Italy. Subsequently shifting to the South-Eastward in the east of Scotland, no important change occurring elsewhere.

Barometer highest, 30·0 ins. and upwards over the Atlantic—to the westward of our Islands, and also in a small system lying over the south of Spain. Lowest, 29·2 ins. and less in a depression over the north of Russia; 29·6 ins. and less in another system lying over eastern Austria. Barometer falling slowly in our Islands during day. Russian and Austrian depressions undergoing little change, but a new one being developed over central Scotland in evening.

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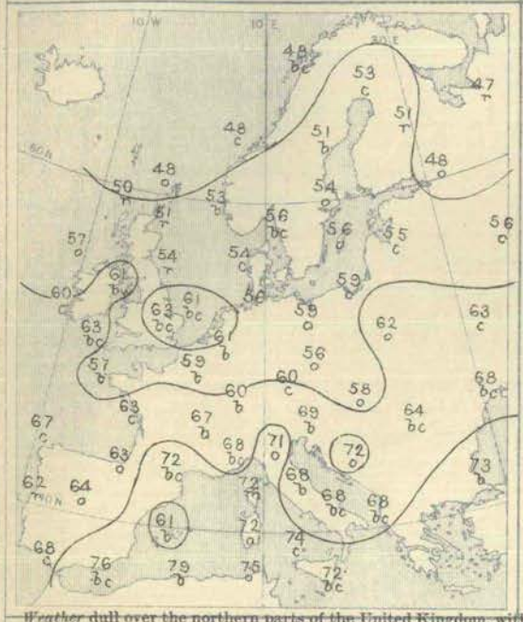
Thursday, 22nd June.

Temperature and Weather.

8 a.m.

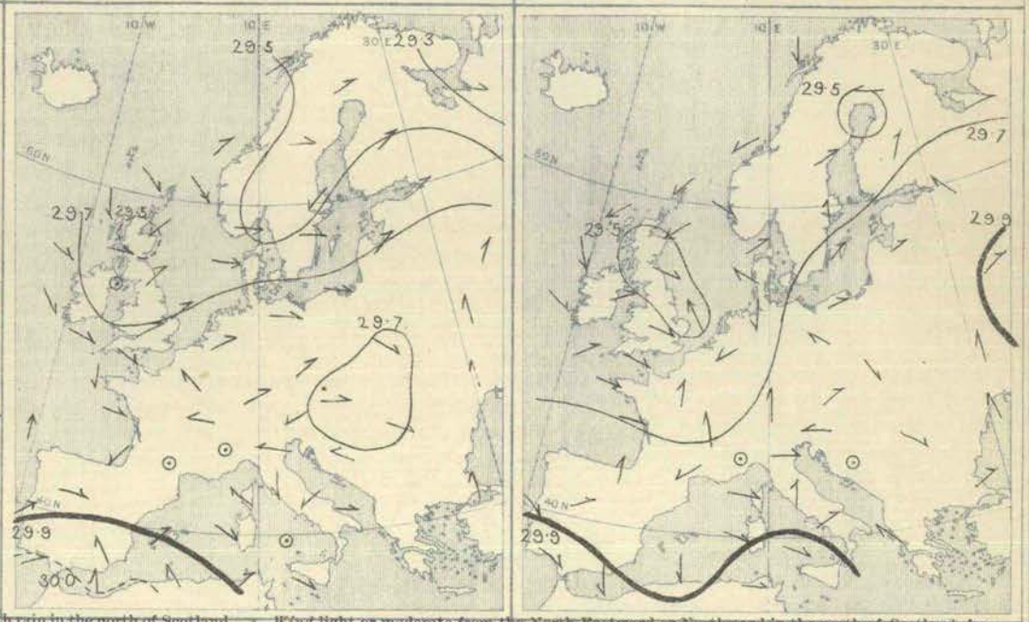


Weather dull over the northern parts of the United Kingdom, with rain in the north of Scotland, dull also over Spain, Germany, Austria, and the northern and central parts of Russia, with rain at Lisbon, Cracow, Archangel, and Kuopio. Fair or fine in nearly all other parts of Europe. Heavy rain falling in the east of Scotland later (1·6 ins. at Aberdeen), and smaller quantities in most other parts of our Islands and France—especially in north-east and east—considerable quantities in several parts of Russia, France, Lombardy, and Spain. Thunderstorm occurring at Yarmouth, and distant thunder heard at Wick.

Temperature changed very irregularly. Morning readings highest, 81° at Palma, 79° at Algiers, 78° at Sfax, 76° at Oran, and 75° at Barcelona and La Calle; above 65° in nearly all parts of southern and eastern Europe, and above 60° in the south of our Islands. Lowest, 47° at Archangel, 48° at Bodö, Christiansund, Sumburgh Head, and St. Petersburg, and 49° at Wick, below 55° at most of the northern stations. Remaining below 60° all day on our extreme north and north-west coasts, but rising to between 70° and 75° over the south-eastern parts of England, and reaching 83° at Lyons and 86° at Palermo.

Barometer and Wind.

8 a.m. 6 p.m.



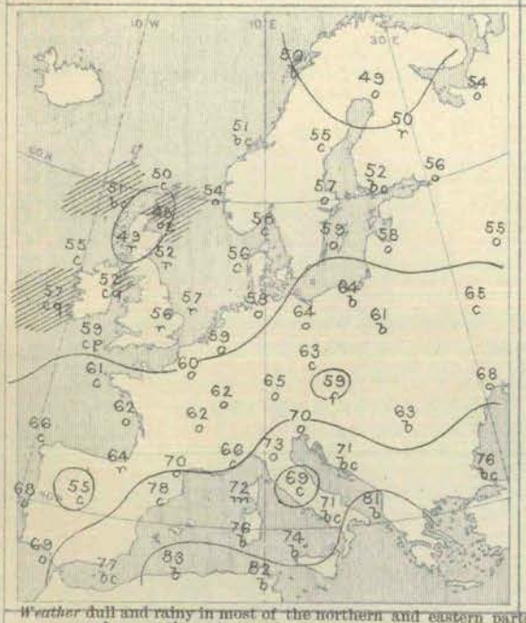
Wind light or moderate from the North-Eastward or Northward in the north of Scotland, from North-Westward on the west coasts of our Islands and France, Southerly or South-Westerly over the eastern and southern parts of England. Strong from the North-Eastward or Northward in the south of Norway, and from the Westward in Denmark—a gale at Faerder. Light from West or South-West in Germany, Easterly or North-Easterly in Italy. South-Easterly in Algeria. Subsequently increasing to a fresh or strong breeze from the North-Eastward in Scotland, and from the Westward or South-Westward in the eastern parts of the Channel.

Barometer highest, 30·0 ins. and upwards over Algeria and the extreme south of Spain, 29·8 ins. and upwards over the Black Sea and the southern parts of Russia. Lowest, 29·3 ins. and less in the extreme north of Russia and White Sea; 29·6 ins. and less in a shallow depression lying over Scotland, 29·7 ins. and less in another shallow system over eastern Austria. Depression over Scotland subsequently increasing both in size and depth, and moving slowly southwards, barometer falling decidedly over Ireland and England.

Friday, 23rd June.

Temperature and Weather.

8 a.m.

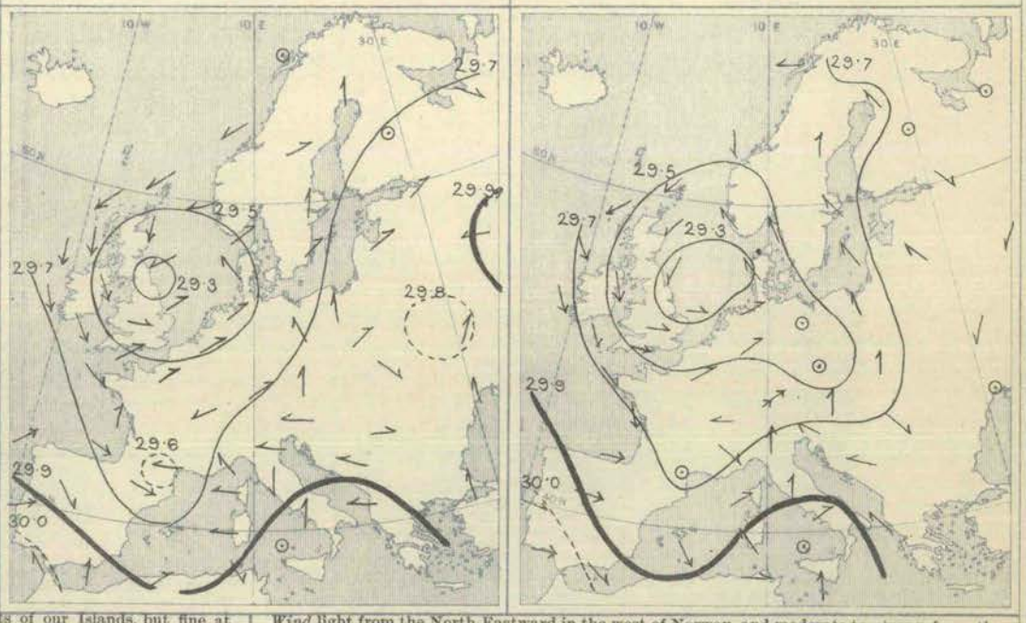


Weather dull and rainy in most of the northern and eastern parts of our Islands, but fine at some of our south-western and extreme southern stations. Fine in the north-west of Norway, as well as in Poland, southern Italy, and Algeria, cloudy in most other parts of the Continent, with fog at Vienna and Münster, rain at Kuopio and in the south of Russia. Rain falling later over the greater part of western Europe and at Kharkov—heavily in the east of Scotland, as well as in the south-west and south of France. Thunderstorms occurring in the latter regions and in some parts of eastern and central England.

Temperature fallen again in our Islands and France, risen elsewhere. Morning readings highest, 83° at Algiers, 82° at Tunis, 81° at Brindisi, and 78° at Barcelona, above 70° at most of the Mediterranean and Adriatic stations. Lowest, 48° at Aberdeen, 49° at Ulcaborg, Ardrossan, and Donaghadee, and 50° at Kuopio, Haparanda, Bodö, Sumburgh Head, Wick, Nairn, and Leith. Daily maxima below 60° on most parts of our western and northern coasts, and below 55° in the east of Scotland; exceeding 65° at one or two of our extreme southern stations, exceeding 70° in many parts of France and Germany, and 85° in many parts of Italy.

Barometer and Wind.

8 a.m. 6 p.m.



Wind light from the North-Eastward in the west of Norway, and moderate to strong from the same quarter in Scotland. Moderate or fresh from the North-Westward in the west and south-west of our Islands and the west of France, and from the Westward over the eastern parts of the Channel, South-Westerly over the Netherlands and the east of England, Southerly in Denmark, Sweden, and Finland, variable in Italy and Austria, Westerly or South-Westerly at most of the Spanish stations. No important change occurring over western Europe during day, but backing to South-East over the Baltic.

Barometer highest, 30·0 ins. and upwards in an anticyclone lying off the south of Spain; 29·9 ins. and upwards over central Russia. Lowest, 29·3 ins. and less in a well-marked depression lying over the north of England and the adjacent parts of the North Sea; 29·6 ins. and less in a small shallow system near Perpignan. Depression over north of England subsequently moving away slowly in an easterly direction; barometer rising in most parts of our Islands and France.

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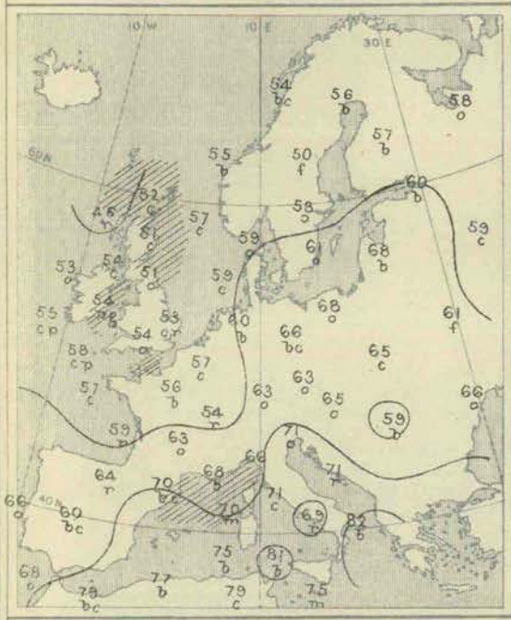
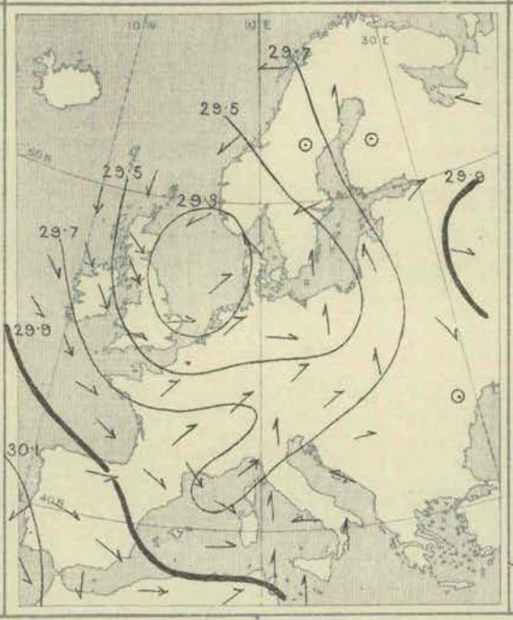
Saturday, 24th June.

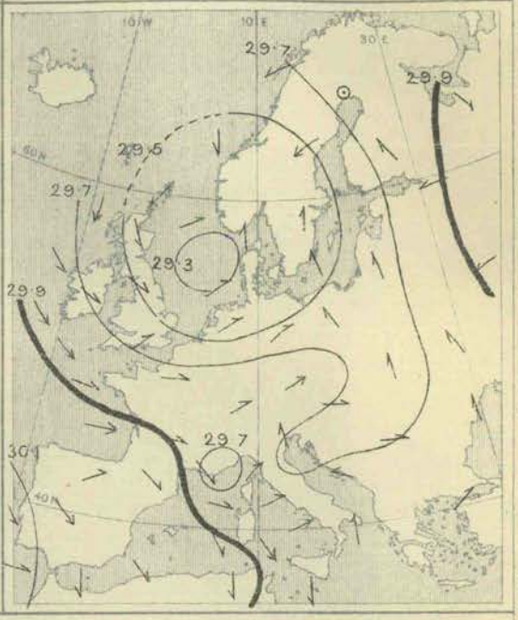
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over Finland and northern Europe, and, locally, in some parts of western and southern Europe also, but changeable and unsettled as a whole, with rain in many localities, and fog in the south of Russia, as well as at Hernösand. Rain later over nearly the whole of western and north-western Europe, but amounts small except at some of the Scandinavian stations, where they exceeded an inch; thunderstorms in the north-west of Germany.

Temperature in morning highest, 82° at Brindisi, 81° at Palermo, and above 70° at most of the Mediterranean stations; exceeding 60° over south-eastern and central Europe, and also at one or two northern stations. Lowest, 48° at Stornoway, 51° at Nairn, Aberdeen, and Shields, and below 55° over the greater part of the British Islands. Rising later to between 85° and 90° over the southern parts of Italy to between 70° and 80° in many parts of France, but remaining below 65° over the United Kingdom as a whole, and just touching 55° in the north and east of Scotland.

Wind Northerly to North-Westerly, fresh to strong over the United Kingdom, Westerly and South-Westerly over Germany, Southerly over the Baltic, calm over northern Europe, North-Westerly over the western half of the Mediterranean, South-Westerly and Southerly in the east. Becoming more Westerly over England and France later, a South-Easterly breeze setting in over Finland, and a strong North-Westerly breeze at Cagliari and Palermo.

Barometer highest, (1) 30·1 ins. and more to 29·8 ins. over the Iberian Peninsula, the west of France, the Bay of Biscay, and adjacent parts of the Atlantic; (2) 29·9 ins. and more to 29·8 ins. over Russia. Lowest, 29·3 ins. and less in a depression over the North Sea, and below 29·7 ins. over the Gulf of Genoa. The North Sea depression moving north-eastwards later, and barometer rising over western Europe.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are show by arrows, which are drawn flying *with the wind*, the force is indicated thus : ⇉ = a heavy gale; → = a gale; → = a fresh to strong breeze; → = a light to moderate breese: and ⊙ = a calm. In the left-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Germany, Sweden, and Norway, and 7 a.m. in France, Algeria, Italy, Austria, and Russia; that for 6 p.m. is prepared from observations made at 6 p.m. in the British Islands and France, 7 p.m. in Algeria, 8 p.m. in Sweden and Norway, Germany, and Austria, and 9 p.m. in Russia, Belgium, and Italy. The time indicated in each case is the standard time for each country.

GENERAL NOTES.

In the course of the past week there has been a complete breaking up of the long period of dry weather which had prevailed for several months over western Europe. The change commenced first over Russia, Austria, and south-eastern Europe, but during Monday and Tuesday temperature gave way rapidly over the British Islands, Germany, and the north of France, and in the southern parts of the latter country rain became prevalent. Early on Thursday a well-defined depression appeared over Scotland, and, while heavy rain set in over that country accompanied by Northerly and North-Easterly winds, considerable quantities were reported in the north and east of England also, but our south-western coasts escaped. Towards the end of the week a warm South-Easterly current of wind was setting in over Russia and northern Europe, while cool Northerly and North-Westerly winds were observed over the British Islands, and Westerly breezes in France, but the weather was unsettled generally and showers prevalent in most places

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 146.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	STATIONS	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	28·2	?	23	?	EASTBOURNE	53·1	?	47	?
OSWALDKIRK (Yorkshire)	30·6	?	26	?	TENBY	58·0*	?	50*	?
WORKSOP	30·7	−4·7	26	− 4	NEWQUAY	94·3	?	83	?
THURCASTON (Leicestershire)	44·7	+8·4	38	+ 6	TORQUAY	71·3*	?	63*	?
MARGATE	38·7	?	34	?	ARLEY COTTAGE (County Cavan)	47·6	?	40	?
WESTBOURNE (Sussex)	57·7 *	?	51*	?	GUERNSEY	87·8*	?	78*	?
BRIGHTON	53·9	?	47	?					

* The values at Westbourne, Tenby, Torquay and Guernsey are obtained by Jordan's Photographic Recorder.

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WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE. 63, VICTORIA STREET, LONDON, S.W. R. H. SCOTT, F.R.S., SECRETARY.

By whom Subscriptions, payable in advance, can be received.

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VOL. X. No. 26.] *Third Series.* WEEK ENDING SATURDAY, 1ST JULY, 1893. [*Price 6d.* [*Annual Subscription, post paid, £1 10s. 0d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871-90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the twenty-five years 1866-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90 only BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the ten years 1881-90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

	DISTRICTS. (See p. 146.)	Observed during the Week. Highest.	Observed during the Week. Lowest.	Averages of Daily Maxima.	Averages of Daily Minima.	Averages of Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 1st, 1893. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	78	40	62·2	48·1	54·7	1 above.	89*	+19	0	− 1	1004	+351	485	− 57
	1. SCOTLAND, EAST	77	41	64·6	48·7	56·1	0 (average)	99	+ 7	0	0	1137	+255	548	− 21
	2. ENGLAND, N.E.	77	44	66·3	52·0	58·6	2 above.	116	+17	0	0	1172	+285	436	− 62
	3. ENGLAND, EAST	81	42	70·6	50·6	59·9	1 above.	125	+12	0	0	1424	+341	524	− 37
	4. MIDLAND COUNTIES	86	40	71·8	50·2	60·3	2 above.	128	+17	0	0	1555	+448	505	− 47
	5. ENGLAND, SOUTH	84	41	68·8	53·5	60·6	1 above.	130	+11	0	0	1579	+386	373	− 43
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	77	35	65·0	49·4	56·7	0 (average)	103	+ 9	0	0	1264	+351	354	− 63
	7. ENGLAND, N.W.	79	43	67·3	52·3	59·3	2 above.	121	+19	0	0	1414	+445	323	− 91
	8. ENGLAND, S.W.	84	41	68·0	52·7	59·8	1 above.	125	+15	0	0	1621	+494	246	− 70
	9. IRELAND, NORTH	79	39	66·7	50·9	58·2	2 above.	113	+17	0	0	1408	+391	258	−104
	10. IRELAND, SOUTH	74	43	66·1	52·1	58·6	1 above.	116	+10	0	0	1611	+423	178	−100
	—CHANNEL ISLANDS	85	49	68·7	56·4	62·1	3 above.	141	+27	0	0	1821	+573	70	− 52

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 146.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the mean for the Week.	From Jan. 1st, 1893. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 1st, 1893. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of ins.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	3	4	3 less.	106	−12	18·5	− 3·8	31	− 2	25	− 1	614	− 50	26	− 3
	1. SCOTLAND, EAST	4	7	1 more.	87	− 7	11·0	− 2·9	41	− 6	34	− 6	768	+ 14	33	0
	2. ENGLAND, N.E.	3	4	1 less.	72	−16	8·0	− 3·3	43	+ 8	36	+ 8	852	+184	37	+ 8
	3. ENGLAND, EAST	2	3	3 less.	71	−15	7·4	− 3·8	53	+ 8	46	+ 8	1022	+218	45	+ 10
	4. MIDLAND COUNTIES	3	4	2 less.	71	−14	7·9	− 4·9	53	+ 12	45	+11	959	+249	42	+ 11
	5. ENGLAND, SOUTH	4	4	1 less.	68	−15	7·8	− 4·5	49	+ 4	43	+ 3	1047	+284	46	+ 13
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	4	5	3 less.	87	−14	15·2	− 7·5	45	+ 3	38	+ 2	856	+124	37	+ 5
	7. ENGLAND, N.W.	4	9	3 more.	76	−16	10·6	− 3·8	44	+ 4	38	+ 4	858	+136	37	+ 6
	8. ENGLAND, S.W.	3	6	0 (average)	70	−24	11·7	− 6·0	54	+ 6	48	+ 5	1132	+284	49	+ 12
	9. IRELAND, NORTH	4	10	3 more.	92	−15	12·6	− 3·4	47	+ 11	40	+11	715	+ 14	31	0
	10. IRELAND, SOUTH	4	10	4 more.	80	−20	13·3	− 4·9	41	+ 1	35	+ 1	822	+ 24	36	+ 1
	—CHANNEL ISLANDS	3	5	0 (average)	73	−29	9·4	− 5·2	60	+ 7	53	+ 5	1296	+318	57	+ 14

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather continued unsettled and showery in all districts during the earlier part of the period, with thunder and lightning in several localities. Subsequently, however, the conditions became fine and dry again in all districts, and continued so for the remainder of the week.

Temperature just equalled the mean in Scotland E. and W., but was slightly above it in all other districts. The highest of the maxima, which occurred at most stations on July 1st, varied from 86° in the Midland Counties, 85° in the Channel Islands, and 84° in England S. and S.W., to 74° in Ireland S. The lowest of the minima were recorded, as a rule, during the earlier days of the period, and ranged from 35° in Scotland W., and 39° in Ireland N., to 44° in England N.E., and to 49° in the Channel Islands.

Rainfall was rather more than the mean in Scotland E., England N.W., and over Ireland, and just equal to it in England S.W. and the Channel Islands; in all other districts, however, there was again a deficit. In some parts of Ireland the rain was very heavy locally—thus, on Tuesday at Dungannon the large amount of 3·33 ins. was recorded between 0·30 p.m. and 7 p.m.

Bright Sunshine was rather less than the normal in Scotland, but exceeded it over England and Ireland. The percentage of the possible duration ranged from 53 in the Channel Islands, and from between 43 and 48 in most parts of England, to 25 in Scotland N.

Barometer and Wind.—During the earlier half of the week barometrical pressure was affected by a well-defined and somewhat deep depression which travelled northwards and north-eastwards from the south-west of Ireland to Scotland, and disappeared to the north-eastward of the Shetlands. Fresh or strong Westerly and South-Westerly winds were very general over Ireland and England during the passage of this system, and in the English Channel they attained the force of a slight gale. Towards the end of the week the conditions became anticyclonic, with light Southerly winds in the west and north, and Easterly airs in the south and south-east.

* This value has been altered slightly owing to additional information for a preceding week.

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II.—DATA from which the SUMMARY on page 151 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°				Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	58	45	56·4	48·1	52·0	+ 1·0	70	0	3	0·46	−0·02	*	*	*	*
	Stornoway	67	44	59·4	46·6	52·6	− 0·6	74	0	4	0·11	−0·59	36·8	− 1·3	30	− 1
	Wick	64	47	59·7	49·0	54·0	+ 0·3	84	0	3	0·43	−0·01	*	*	*	*
	Lairg Ⓢ	75	40	64·2	46·0	54·5	+ 0·1	88	0	4	0·28	−0·31	*	*	*	*
	Glencarron Ⓢ	78	44	64·5	47·6	55·5	+ 2·0	95	0	5	0·69	−0·59	*	*	*	*
	Fort Augustus Ⓢ	78	46	67·2	49·4	57·7	+ 2·2	110	0	2	0·63	+0·03	25·5	?	21	?
	Fort William Ⓢ	75	47	64·0	50·3	56·7	+ 0·7	103	0	3	0·41	−0·62	31·3	?	25	?
1. SCOTLAND, E.	Nairn	77	43	65·6	46·7	55·5	− 0·9	95	0	2	0·56	+0·11	*	*	*	*
	Aberdeen	68	47	61·3	50·4	55·5	− 0·2	95	0	3	0·37	−0·11	35·5	− 7·1	29	− 6
	Braemar Ⓢ	70	41	62·0	46·8	53·9	+ 0·3	83	0	4	0·47	−0·13	36·8†	?†	30†	?†
	Ochtertyre Ⓢ	75	44	67·1	50·0	58·0	+ 1·9	112	0	4	1·80	+1·12	*	*	*	*
	Leith	69	45	65·7	50·6	57·6	+ 0·4	109	0	4	0·28	−0·24	*	*	*	*
	Marchmont Ⓢ	70	42	66·1	47·4	56·1	+ 0·6	99	0	4	0·72	+0·04	50·5	?	42	?
2. ENGLAND, N.E.	Alnwick Castle	69	50	62·9	53·9	58·1	+ 2·6	113	0	3	0·36	−0·18	*	*	*	*
	Durham	77	44	69·4	50·6	59·4	+ 2·1	122	0	4	0·34	−0·18	45·6	+ 9·4	38	+ 7
	Shields	71	46	64·7	49·3	56·5	− 0·1	102	0	4	0·47	+0·01	*	*	*	*
	Scarborough Ⓜ	72	48	66·1	52·9	59·0	+ 1·5	119	0	4	0·42	−0·08	*	*	*	*
	York	75	47	69·1	51·9	59·9	+ 1·4	125	0	3	0·59	+0·07	47·2	+ 9·2	40	+ 9
	Spurn Head	73	50	65·3	53·3	58·9	+ 1·4	118	0	2	0·36	+0·01	*	*	*	*
3. ENGLAND, E.	Hillington Ⓜ	78	42	71·6	50·1	60·1	+ 1·2	127	0	2	0·35	−0·22	52·4	+ 9·7	45	+ 6
	Yarmouth	74	47	66·4	53·0	59·2	+ 0·7	120	0	3	0·31	−0·20	*	*	*	*
	Geldeston	77	45	68·8	50·3	58·9	+ 0·1	118	0	2	0·22	−0·23	55·2	+ 8·3	48	+ 6
	Cambridge	81	44	74·7	50·1	61·5	+ 1·6	137	0	2	0·12	−0·42	57·7	+14·9	50	+12
	Rothamsted	79	43	71·5	49·5	59·7	+ 0·8	124	0	3	0·31	−0·28	46·3	?	40	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	79	41	73·0	48·1	59·7	+ 0·5	124	0	2	0·59	+0·01	*	*	*	*
	Loughborough	83	41	73·7	50·7	61·4	+ 1·0	136	0	3	0·35	−0·17	*	*	*	*
	Stamford (Ketton Hall)	82	43	74·1	50·3	61·4	+ 1·5	136	0	3	0·30	−0·22	*	*	*	*
	Cheadle Ⓜ	73	43	67·5	50·3	58·3	+ 1·7	114	0	3	0·73	+0·05	*	*	*	*
	Churchstoke Ⓜ	79	40	68·8	48·5	57·9	+ 1·1	111	0	3	0·58	+0·04	50·2	+10·1	43	+ 8
	Hereford Ⓜ	86	43	73·2	50·5	61·1	+ 1·7	134	0	2	0·28	−0·22	*	*	*	*
	Cirencester	81	45	71·7	51·9	61·1	+ 3·3	134	0	3	0·15	−0·43	52·0	+10·7	45	+ 8
	Oxford	82	45	72·1	51·6	61·1	+ 1·7	134	0	3	0·07	−0·46	49·7	+ 7·3	43	+ 6
5. ENGLAND, S.	London	79	46	72·0	52·6	61·6	+ 0·3	137	0	4	0·36	−0·16	43·8†	+ 5·5†	38†	+ 3†
	North Foreland	72	48	66·9	53·7	59·8	+ 1·1	125	0	0	—	?	*	*	*	*
	Strathfield Turgiss Ⓜ	84	41	72·7	49·8	60·5	+ 0·5	130	0	5	0·28	−0·21	*	*	*	*
	Dungeness	68	49	65·9	55·6	60·4	+ 0·8	129	0	3	0·10	−0·28	*	*	*	*
	Hastings (St. Leonards)	77	47	66·1	54·0	59·6	0·0	123	0	4	0·44	+0·04	53·6	+ 4·6	46	+ 3
	Southampton	78	48	70·0	53·8	61·3	+ 1·1	135	0	3	0·52	+0·09	48·7	+ 2·6	43	+ 1
	Hurst Castle	77	54	67·3	56·4	61·5	+ 1·8	137	0	3	0·61	+0·12	*	*	*	*
	Stowell Ⓜ	81	43	69·6	52·1	60·2	+ 1·1	127	0	6	0·50	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	77	43	64·8	49·2	56·5	+ 0·4	102	0	4	0·30	−0·91	*	*	*	*
	Glasgow	75	44	66·4	50·4	57·8	+ 1·3	111	0	3	0·68	−0·02	38·0	+ 2·7	31	+ 1
	Ardrossan	74	45	64·4	50·3	56·9	0·0	104	0	3	0·43	−0·17	*	*	*	*
	Glenlee Ⓢ	73	35	65·4	47·8	56·0	+ 0·4	98	0	3	0·59	−0·23	*	*	*	*
	Douglas (Isle of Man)	70	42	63·8	49·3	56·1	− 0·1	99	0	5	0·59	+0·01	52·1	+ 3·8	44	+ 2
7. ENGLAND, N.W.	Newton Reigny	71	43	63·3	49·6	56·0	− 0·1	98	0	3	0·85	+0·27	46·3	+ 4·3	39	+ 6
	Stonyhurst	76	47	66·7	51·4	58·5	+ 1·1	116	0	6	1·37	+0·49	36·0	− 4·3	31	− 4
	Blackpool Ⓜ	77	53	67·7	54·4	60·6	+ 2·0	130	0	4	0·73	+0·19	44·3	+ 2·6	38	+ 3
	Manchester	78	45	69·4	50·0	59·0	+ 1·4	119	0	4	0.99	+0·24	39·4†	?	34†	?
	Liverpool Obsy. (Bidston)	79	50	70·1	54·7	61·9	+ 3·1	139	0	2	0·60	+0·07	*	*	*	*
	Llandudno Ⓜ	77	49	66·9	53·3	59·6	+ 0·9	123	0	3	0·93	+0·46	53·8	+14·6	46	+12
	Holyhead	73	50	66·7	53·0	59·4	+ 1·8	122	0	4	0·71	+0·23	*	*	*	*
3. ENGLAND, S.W.	Llandovery	83	41	71·6	49·6	59·8	+ 1·1	125	0	3	1·36	+0·61	*	*	*	*
	Pembroke	67	52	62·9	54·7	58·2	+ 1·1	113	0	3	0·56	+0·08	52·3	+ 1·1	45	0
	Bristol (Montpelier)	84	46	72·8	53·1	62·3	+ 2·6	142	0	4	0·15	?	*	*	*	*
	Arlington (N. Devon)	80	43	68·4	50·7	58·9	+ 1·9	118	0	3	0·48	−0·42	*	*	*	*
	Cullompton Ⓜ	79	41	71·3	51·2	60·6	+ 1·8	130	0	3	0·48	−0·12	53·4	+10·6	47	+ 9
	Falmouth	72	49	66·4	54·8	60·2	+ 0·7	127	0	4	0·88	−0·24	60·5	+ 9·0	54	+ 9
	Plymouth	77	47	66·9	54·0	60·0	− 0·5	126	0	4	0·67	+0·15	5..5	+ 5·0	45	+ 4
	Prawle Point	71	49	63·6	53·3	58·1	+ 0·6	113	0	3	0·54	+0·12	*	*	*	*
9. IRELAND, N.	Malin Head	74	48	65·1	51·3	57·7	+ 1·7	110	0	4	0·92	?	*	*	*	*
	Londonderry	79	42	70·3	49·8	59·3	+ 1·8	121	0	4	0·78	+0·12	*	*	*	*
	Edenfel (Omagh)	76	48	67·6	52·3	59·4	+ 3·0	122	0	5	1·06	+0·40	*	*	*	
	Belmullet	70	47	64·9	52·6	58·3	+ 1·9	114	0	5	0·53	?	*	*	*	*
	Markree Castle	70	39	65·5	48·2	? 56·3	? + 0·6	?100	0	4	1·01	+0·22	44·3	+11·3	38	+10
	Brookeborough	74	43	67·2	51·1	58·6	+ 2·7	116	0	3	1·33	+0·63	*	*	*	*
	Armagh	74	44	67·2	49·3	57·6	+ 0·7	109	0	3	0·88	+0·31	50·3	+13·8	43	+12
	Donaghadee	70	54	65·3	55·3	60·0	+ 3·5	126	0	6	1·37	+0·87	*	*	*	*
	Edgeworthstown	74	42	66·9	47·9	56·7	0·0	103	0	5	1·59	+0·86	*	*	*	*
10. IRELAND, S.	Dub in	73	50	67·4	53·1	59·8	+ 0·7	125	0	5	0·87	+0·42	52·4	+13·0	45	+12
	Parsonstown	74	46	67·3	51·1	58·6	+ 1·4	116	0	4	0·71	+0·11	33·5	− 4·2	29	− 4
	Kilkenny	72	43	65·9	49·7	57·2	− 0·4	106	0	3	1·07	+0·55	*	*	*	*
	Waterford	72	44	66·9	49·8	57·8	− 0·7	111	0	3	1·37	+0·77	*	*	*	*
	Roche's Point	66	50	63·9	53·4	58·3	− 0·6	114	0	4	1·38	+0·66	*	*	*	*
	Valencia	67	50	64·6	53·7	58·7	+ 1·0	117	0	4	1·07	+0·25	36·5	− 5·1	32	− 4
	Killarney	71	47	65·5	52·4	58·5	+ 1·3	116	0	4	0·91	?	*	*	*	*
	Foynes	71	48	67·1	53·2	59·7	+ 2·0	124	0	4	0·85	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	70	54	66·4	55·7	60·7	+ 2·1	131	0	2	0·44	−0·04	*	*	*	*
	Jersey	85	49	70·9	57·0	63·5	+ 3·3	151	0	3	0·55	+0·06				

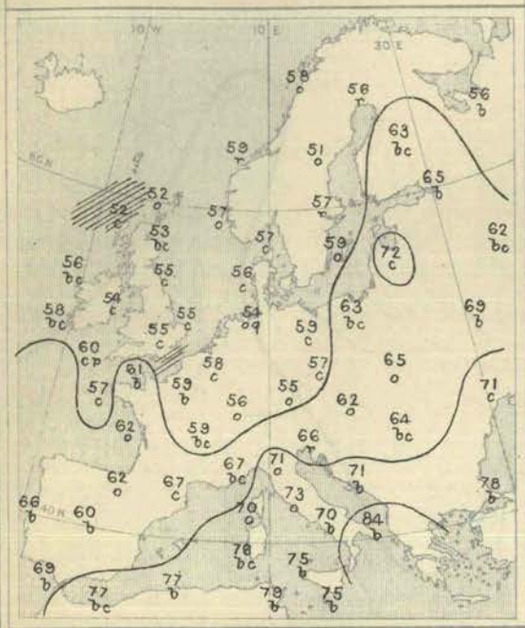
Stations marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

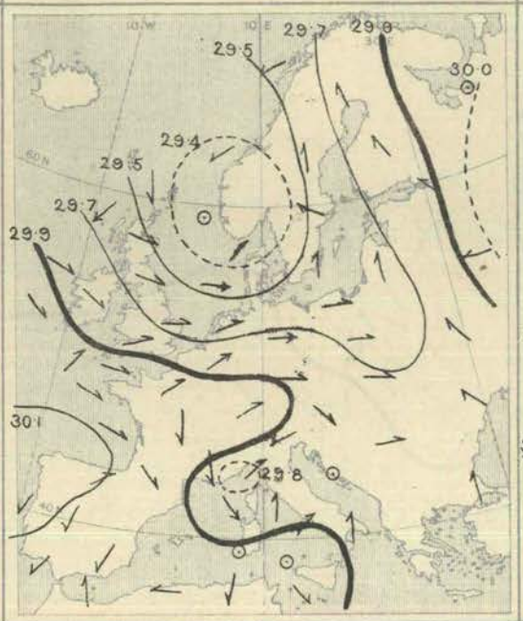
† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row) at the Kew Observatory, and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

Sunday, 25th June.

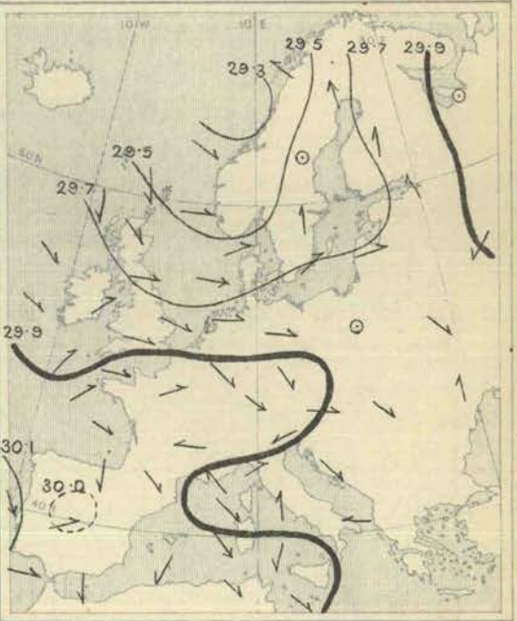
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine (but not settled) over the greater part of western and southern Europe, as well as over central and northern Russia; cloudy, changeable, and unsettled over Scandinavia, Scotland, the North Sea, and central Europe, with rain at several of the northern and north-western stations, as well as at Trieste. Some rain later in several parts of France, the British Islands, Denmark, and Scandinavia, a heavy fall at Haparanda; weather rather squally in the English Channel. Thunderstorms occurring in many parts of Germany and also at Vienna.

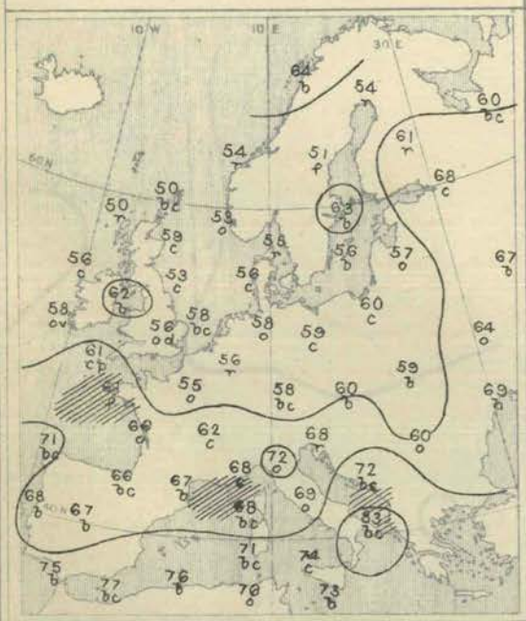
Temperature fallen decidedly over central Europe, risen slightly in the north-west. Morning readings highest, 84° at Brindisi, 79° at Tunis, but below 70° except in extreme south and south-east, exceeding 60° over central Russia and Finland, but below 60° over the British Islands and central Europe. Lowest, 52° at Sumburgh Head, Stornoway, and Nairn, 53° at Aberdeen and Malin Head, 54° at Spurn Head and Liverpool. Not exceeding 66° at any of our own stations later, but rising to between 70° and 78° in the south-west and south of France, to 80° or more over the greater part of Spain and Italy, and to 90° at Brindisi.

Wind strong Northerly in the north of Scotland, moderate to fresh, Westerly over England, the Channel, and North Sea, Westerly to South-Westerly over north Germany, light South-Easterly over Finland, and Southerly over the Gulf of Bothnia. Small cyclonic circulation of fresh winds over the Gulf of Genoa and north of Italy. No decided change later.

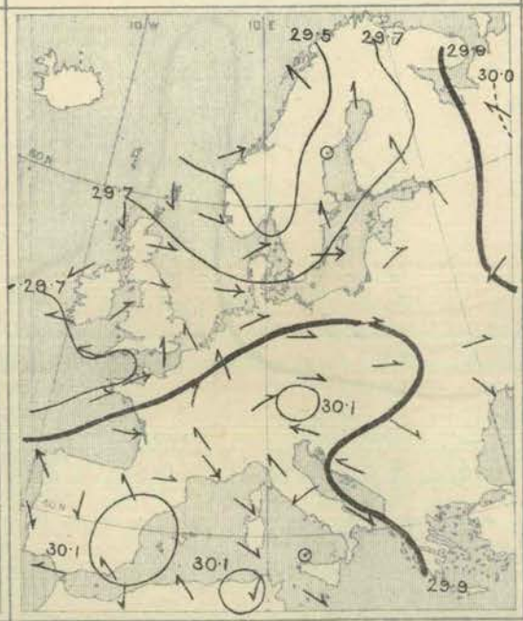
Barometer highest, (1) 30·1 ins. and more over the Iberian Peninsula, and exceeding 30·0 ins. over the Bay of Biscay and south-west of France; (2) 30·0 ins. and more over central and northern Russia. Lowest, 29·4 ins. and less in a depression lying over the southern parts of Norway, and north-eastern parts of the North Sea; and 29·8 ins. and less over the Gulf of Genoa. Falling on our south-western coasts later, rising elsewhere. New small depression approaching mouth of Channel from Atlantic. Disturbance over Norway moving steadily northwards

Monday, 26th June

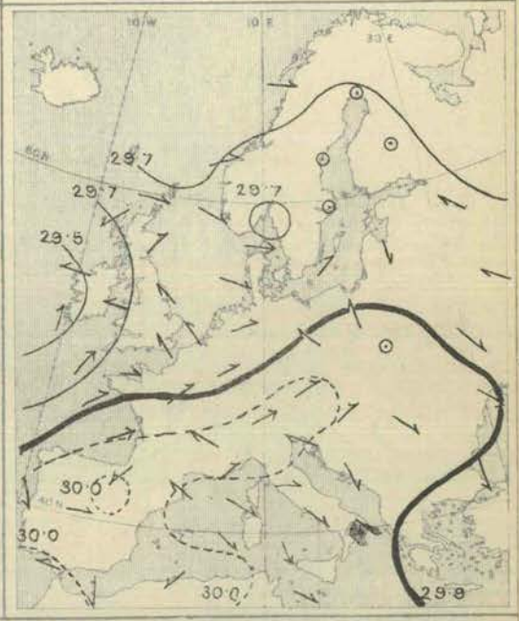
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather cloudy and showery over the Channel and south of England, but fair or fine in most other parts of the United Kingdom, and also over a considerable portion of the Continent. Foggy over the Gulf of Finland, rainy in many parts of Finland and Scandinavia; dull over the northern parts of Italy and the Adriatic, with rain at Trieste. Rain setting in later in the west of our Islands, and spreading quickly eastwards, amounts large at several western stations. Rain falling also in many parts of Russia—heavily at St. Petersburg.

Temperature risen in most parts of western and north-western Europe, but fallen in many of the eastern, central, and southern regions. Morning readings highest, 83° at Brindisi, 77° at Oran, and 76° at Algiers and La Calle; above 70° in many parts of southern Europe, above 65° over Russia, and as high as 64° at Bodö. Lowest, (1) 50° at Sumburgh Head and Stornoway, and 53° at Wick; (2) 51° at Hernösand and Hango, and 52° at Helsingfors; (3) 53° at Wiesbaden, and 54° at Breslau; (4) 54° at Prawle Point. Rising during day to a little above 70° at some of the English stations, 80° and upwards in many parts of southern Europe, the highest readings of all being 93° at Cape Béarn, and 91° at San Fernando.

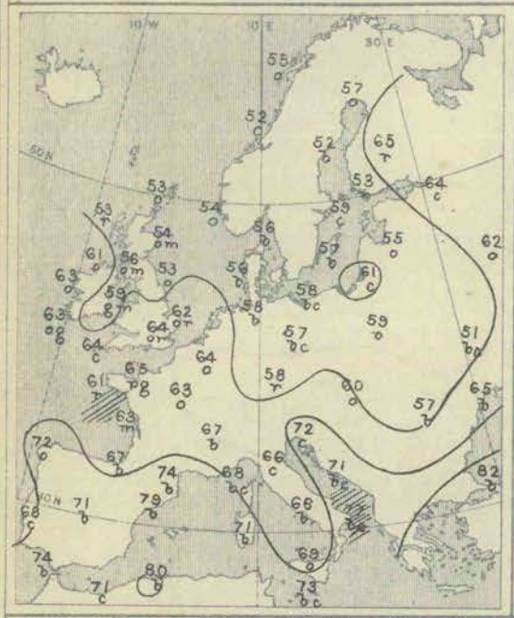
Wind fresh from West or South-West in the west of France, light from South or South-East over the eastern parts of England and France; light to moderate from the Eastward on our south and south-west coasts. Light Westerly to Northerly in Scotland, moderate to strong from the Westward over Denmark, Germany, and the southern parts of Scandinavia; light from South or South-East over the northern parts of Russia and Scandinavia. Variable over Spain, Italy, and Algeria. Subsequently shifting to the Southward on our south-west coasts, and to the South-Eastward in the north and north-east of our Islands.

Barometer highest, 30·0 ins. to 30·1 ins. or more in an anticyclone lying over Spain, Algeria, the western parts of the Mediterranean, and the southern parts of France and Germany, as well as in another system over the north of Russia. Lowest, 29·5 ins. and less in a large depression over Norway, 29·7 ins. and less in a complex system lying off our south-west coasts, 29·8 ins. and less over the Black Sea and the southern parts of Russia. Depression in south-west subsequently breaking up, but new and deeper disturbance advancing over Ireland from the Atlantic.

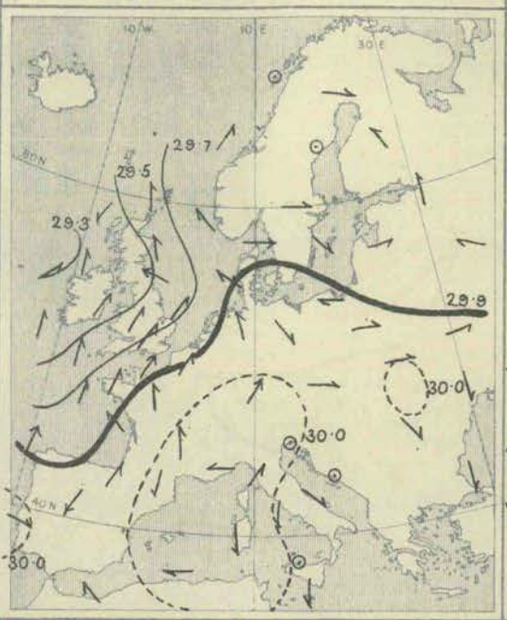
Judd & Co. Ltd. Lith. 63, Carter Lane.

Tuesday, 27th June.

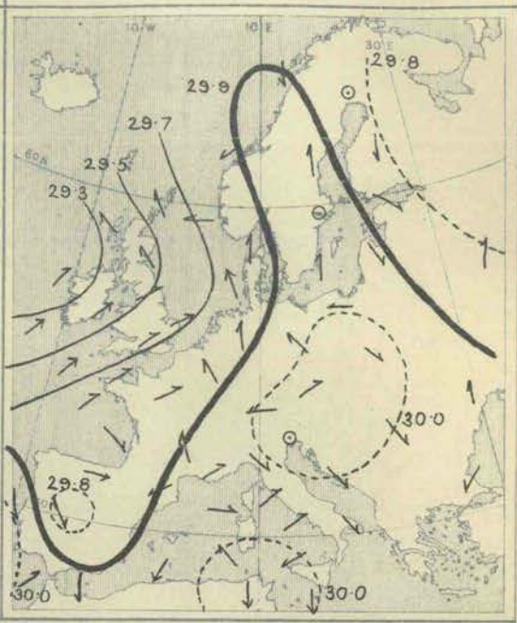
Temperature and Weather. — 8 a.m.



Barometer and Wind. — 8 a.m.



Barometer and Wind. — 6 p.m.



Weather dull over our Islands and their immediate neighbourhood with rain in many places; dull also in many parts of Russia, Austria, and south Germany, and rainy at Kuopio and Munich. Fine and bright at several of the Danish and Scandinavian stations, as well as over southern Europe generally. Rain falling during day in nearly all parts of north-western Europe and also in Russia: thunder and lightning occurring over France and the south of England, and thunder heard at Malin Head.

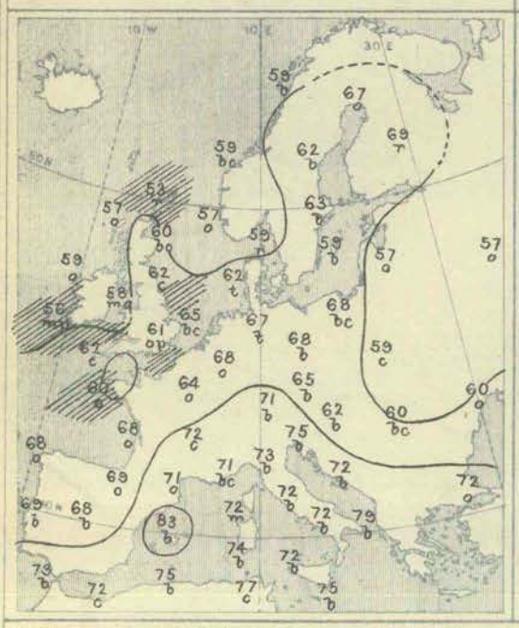
Temperature fallen in Russia and Italy, but risen in nearly all other countries. Morning readings highest, 82° at Constantinople, 80° at Algiers, 79° at Barcelona, 78° at Palma and Sfax, and 77° at Brindisi, above 70° in many of the southern countries, and ranging between 60° and 65° over the greater part of Ireland and England. Lowest, 52° at Hernösand, Christiansund, and Wick, and 53° at Hangö, Sumburgh Head, Stornoway, and Shields. Rising during day to between 70° and 75° in many parts of Ireland and England, and reaching 77° at Loughborough and 80° at Cambridge. Exceeding 80° in most parts of southern Europe, and reaching 90° in several places, the highest reading of all, 95° at Bordeaux and Cape Béarn.

Wind Southerly or South-Westerly over Ireland, England, the west and north of France, and the north of Spain, and strong in force over the eastern parts of the English Channel. Light or moderate from the South-Eastward or Eastward over Scotland and the eastern shores of the North Sea. Westerly or North-Westerly over the Baltic and the south of Sweden, variable in Russia, Germany, and Austria, North-Westerly in Italy, North-Easterly over the central and southern parts of Spain. Subsequently increasing to a moderate gale from the South-Eastward in Caithness, veering to the Westward in the west of France; no important change occurring elsewhere.

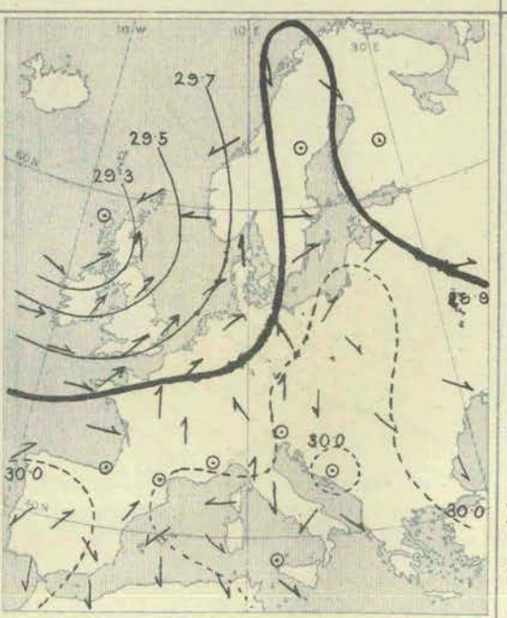
Barometer highest, 30·0 ins. and upwards in a large anticyclone extending from Algeria to northern Italy, Switzerland, and the southern parts of France and Germany, as well as in smaller systems lying respectively over eastern Austria and over the south-west of Spain. Lowest, 29·3 ins. and less in a depression lying off the north-west of Ireland; 29·8 ins. and less in a large shallow area over northern Russia. Depression in north-west spreading eastwards during day, and barometer falling in all parts of western Europe.

Wednesday, 28th June.

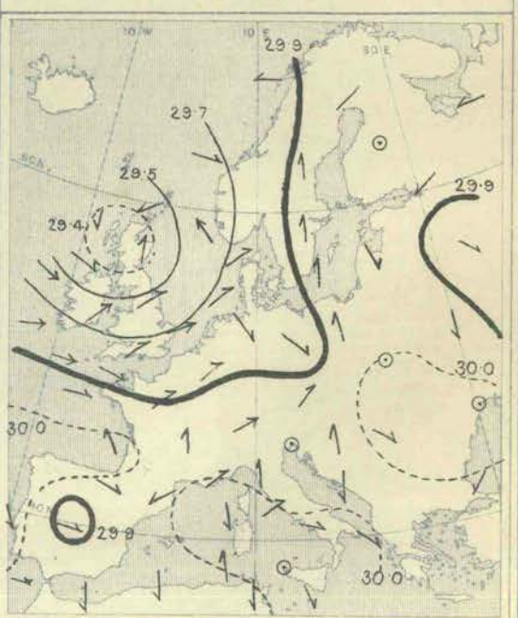
Temperature and Weather. — 8 a.m.



Barometer and Wind. — 8 a.m.



Barometer and Wind. — 6 p.m.



Weather changeable and showery in many parts of north-western Europe, with thunder at Fanö and Cuxhaven. Fine and bright in the more central and southern countries, but dull in Russia with rain at Kuopio. Rain falling during day over the northern parts of the Kingdom generally, and showers at some of our southern stations, thunder heard at Nairn in evening, and thunderstorms occurring in several parts of France and Germany.

Temperature fallen in the western parts of our Islands, but risen in most other localities. Morning readings highest, 83° at Palma, 79° at Brindisi, and 77° at La Calle and Aumale; above 70° in many parts of southern Europe, and above 35° in Belgium, Germany, central Finland, and the north of Sweden. Lowest, (1) 53° at Sumburgh Head, and 57° at Stornoway, Aberdeen, and Malin Head; (2) 55° at Hangö, and 57° at Helsingfors, Riga, and Moscow. Rising during day to 70° or more over the eastern, central, and south-eastern parts of England, and reaching 76° at Cambridge. Exceeding 80° in most parts of central and southern Europe, the highest reading of all being 91° at Florence.

Wind fresh or strong from the Westward on our extreme south-west coasts, and from the South-Westward in most other parts of Ireland and England, light from the Southward in Scotland; moderate from the Eastward on the Norwegian coast. South-Easterly in Germany, light from the Northward or North-Westward over Russia, Austria, and Italy; variable over Spain, Algeria, and the south of France. Subsequently increasing to a moderate to fresh gale from the South-Westward over the south-eastern parts of England, veering to the North-Westward in the north of Ireland; no important change occurring elsewhere.

Barometer highest, 30·0 ins. and upwards in a large anticyclone extending from the Mediterranean across Italy and Austria to Poland and eastern Germany, as well as in a smaller system lying over Spain. Lowest, 29·3 ins. and less in a well-marked depression over the north-western parts of the United Kingdom; gradients rather steep over Ireland and England. Depression subsequently travelling north-eastwards across Scotland, and beginning to fill up; barometer rising in most parts of western Europe.

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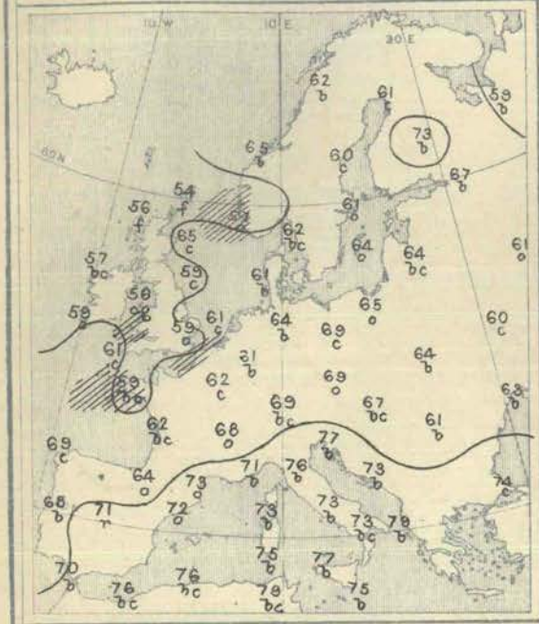
Thursday, 29th June.

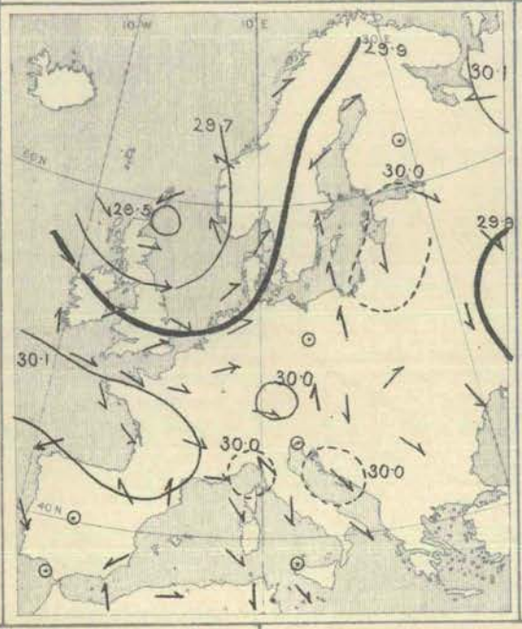
Temperature and Weather.

8 a.m.

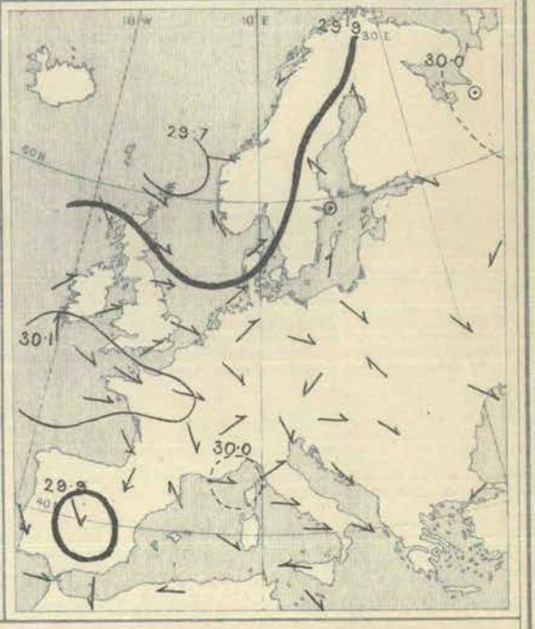


Barometer and Wind.

8 a.m.



6 p.m.



Weather cloudy over the greater part of our Islands, as well as in Sweden, the south of Norway, and the eastern parts of Germany. Fine and bright in nearly all other parts of Europe, but rainy at Madrid. Very slight rain falling during day at one or two of our western stations, but weather remaining fair and dry in all other parts of the Kingdom. Rain experienced at several of the Scandinavian and German stations, and heavy amounts at Cracow and Turin.

Temperature fallen in our Islands, the Netherlands, and France, as well as in Sweden, risen elsewhere. Morning readings highest, 79° at Brindisi, Aumale, and La Calle, and 77° at Toulon, Trieste, Pesaro, Cagliari, and Tunis, above 70° in most parts of southern Europe, and also over central Finland; above 60° at nearly all the Continental stations, as well as in the eastern and south-eastern parts of Great Britain. Lowest, 53° at Malin Head, and 54° at Sumburgh Head. Rising during day to 65° and upwards in most parts of the United Kingdom, and to 70° or 71° in the south-east of England. Exceeding 80° in many parts of central and southern Europe, and reaching 95° at Madrid.

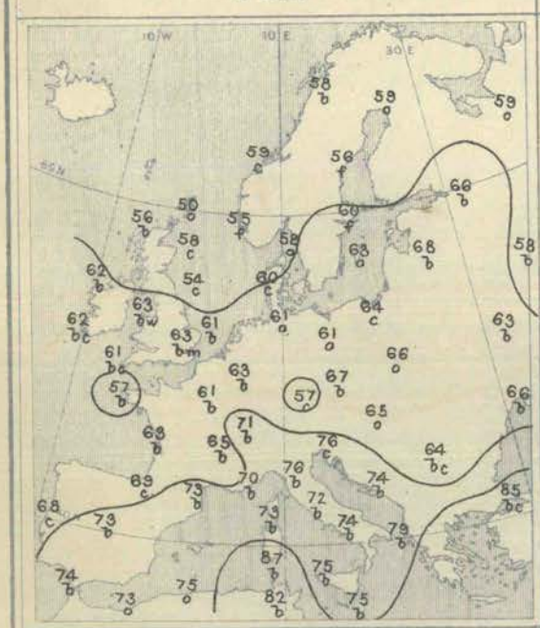
Wind moderate to strong from the Westward or North-Westward in our Islands and France, from the South-Westward over Germany, Denmark, and the Netherlands, and from the South-Eastward in Norway. Light from the Southward in Sweden, variable in the northern parts of Russia and also in Austria. Light from the Northward or North-Westward over Italy and the southern parts of Russia. Chiefly Easterly in Spain, variable in Algeria. Subsequently backing to the South-Westward or Southward in the west of Ireland; no important change occurring elsewhere.

Barometer highest, 30·1 ins. and upwards over the Bay of Biscay and the greater part of France, and also in another system lying over the north of Russia. Lowest, 29·5 ins. and less in a well-marked depression lying off the north-east of Scotland; gradients moderate over our Islands. Depression subsequently travelling away to the north-eastward, barometer rising in nearly all parts of the United Kingdom, but beginning to fall again in the extreme west.

Friday, 30th June.

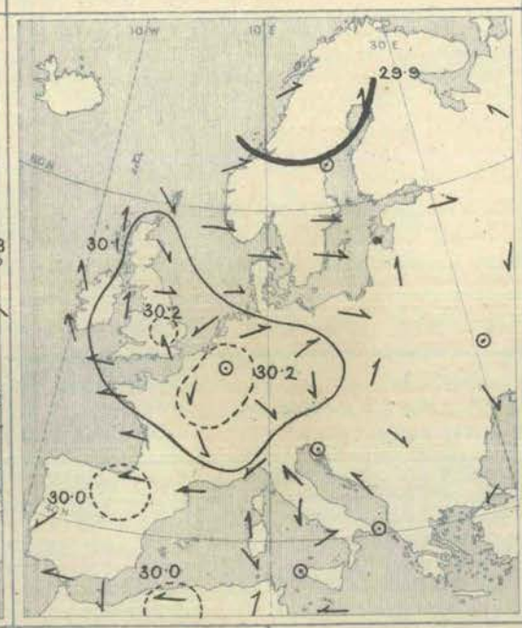
Temperature and Weather.

8 a.m.

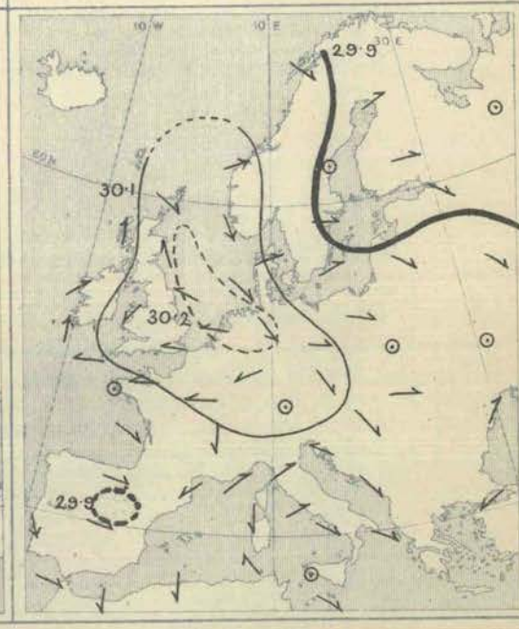


Barometer and Wind.

8 a.m.



6 p.m.



Weather fine and bright over the whole of western and southern Europe, and also over the greater part of Russia. Foggy at several of the Scandinavian stations, and cloudy over the greater part of Denmark, Germany, and Austria, with rain at Memel. Some increase of cloud taking place later in the west of Ireland. Sky clearing in many parts of Germany, but heavy rain falling at Cracow and Lemberg.

Temperature risen in the west and south of our Islands, but fallen in most other localities. Morning readings highest, 91° at Aumale, 87° at Cagliari, 85° at Constantinople, 82° at La Calle; above 70° in most parts of southern Europe, and above 60° in all but the northern parts of our Islands and the Continent. Lowest, 50° at Sumburgh Head, 54° at Shields, and 56° at Hernösand and Stornoway. Rising during day to 75° or more over the central and southern parts of England, and reaching 79° in London and at Cambridge. Exceeding 80° at most of the French stations, and reaching 90° or more in several parts of southern Europe, the highest reading of all being 94° at Madrid.

Wind light or moderate from the Eastward over the Channel and Bay of Biscay, and from the South-Eastward or Southward on the western coasts of our Islands. Light from the North-Westward on our eastern coasts and from the Westward on the eastern shores of the North Sea. Variable over the northern parts of Russia, light from North or North-West over Austria and the southern parts of Russia and Germany. Variable in Italy and Algeria. Subsequently shifting to the Eastward on our eastern coasts and to the Westward in the south-west of France. Veering to the North-Westward on the eastern shores of the North Sea.

Barometer highest, 30·1 ins. to 30·2 ins. in an anticyclone covering the greater part of our Islands, the North Sea, the Netherlands, France, and Germany. Lowest, 29·9 ins. and less in a large shallow depression over the northern parts of Scandinavia. Slight fall taking place during day in France and the west and south of our Islands, and depression beginning to approach our western coasts. Shallow disturbance over Scandinavia moving eastwards.

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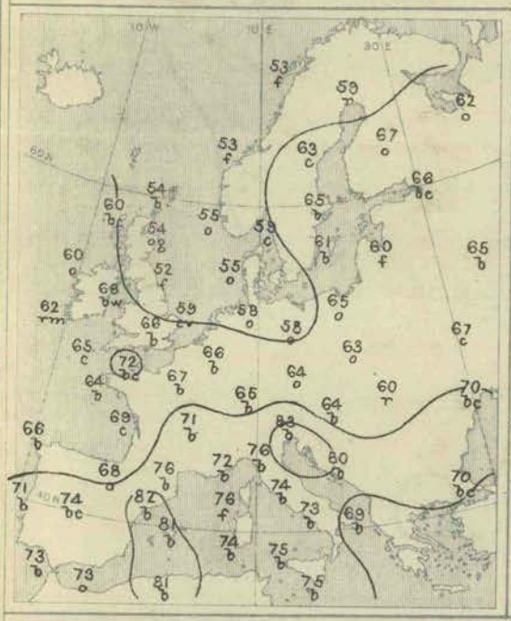
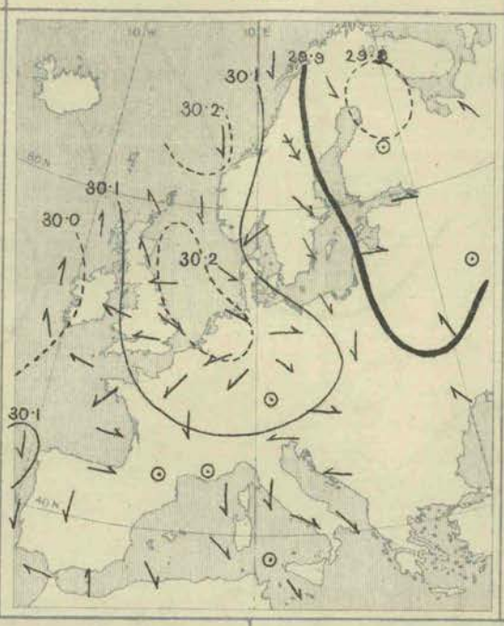
Saturday, 1st July.

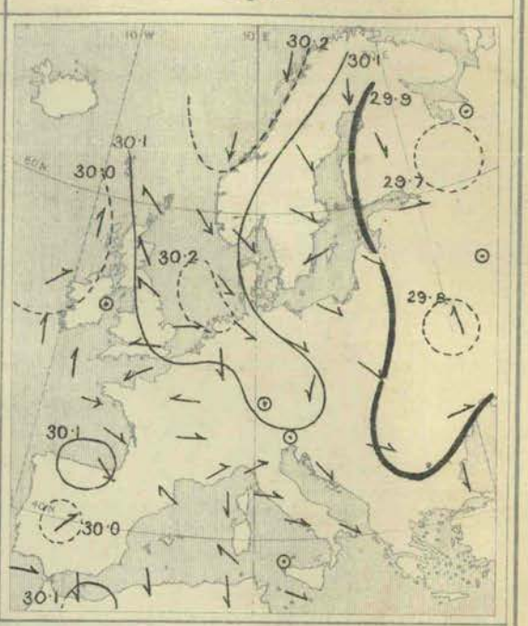
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fine over the greater part of western and southern Europe, but dull in the west of Ireland with rain at Valencia; foggy at the mouth of the Tyne and also in the west of Norway. Dull in many parts of Russia and Germany, with rain at Swinemunde. A little rain falling later at most of the Irish stations, as well as on the north-east coasts of Great Britain; thunderstorms occurring in some parts of France.

Temperature risen in most places. Morning readings highest, 85° at Trieste, 82° at Barcelona, 81° at Aumale, and 80° at Lésina; above 70° in most parts of southern and eastern Europe, and above 65° at several of the English stations. Lowest, 52° at Shields, 53° at Bodö, Christiansund, and Leith, and 54° at Sumburgh Head and Aberdeen. Rising during day to between 80° and 83° over the central parts of England, to 85° or more over southern Europe generally, and to 90° or more at some of the Spanish and Italian stations. Reaching 95° at Florence and 97° at Madrid.

Wind light to moderate from the Southward or South-Eastward in the west and north of our Islands, and from the Eastward in the south and east of England. Northerly or North-Westerly over Scandinavia, Denmark, and Germany; variable in Italy, Algeria, and the south of France; Northerly in Spain. Westerly in the west of France. North-Westerly breezes subsequently setting in over Italy; no important change occurring elsewhere.

Barometer highest, 30·2 ins. and upwards in an anticyclone lying over Holland and the North Sea, and also in a smaller system lying off the west of Norway. Lowest, 29·8 ins. and less in a shallow depression over Lapland; 30·0 ins. and less in another disturbance lying off the west of Ireland. No important change occurring during day, but depression off our western coasts moving slowly northwards.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are show by arrows, which are drawn flying *with the wind*, the force is indicated thus : ⟫⟶ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breese: and ⊙ = a calm. In the left-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds: o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Germany, Sweden, and Norway, and 7 a.m. in France, Algeria, Italy, Austria, and Russia; that for 6 p.m. is prepared from observations made at 6 p.m. in the British Islands and France, 7 p.m. in Algeria, 8 p.m. in Sweden and Norway, Germany, and Austria, and 9 p.m. in Russia, Belgium, and Italy. The time indicated in each case is the standard time for each country.

GENERAL NOTES.

During the early part of the week, when barometrical pressure was highest over central and southern Europe, the weather over the north-western countries was affected by two well-marked cyclonic disturbances.

The first of these lay over the south of Norway on the morning of the 25th June, and subsequently travelled away to the northward, while the second spread slowly over the United Kingdom between the 26th and 28th June, its centre ultimately passing north-eastwards across Scotland and away to the Norwegian coasts. During the progress of the latter system, unsettled showery weather prevailed over the whole of our Islands and their immediate neighbourhood, with thunderstorms in places. On the 28th June, a slight gale from the South-Westward or Westward was experienced in the English Channel.

In the rear of the two disturbances an anticyclone was gradually formed off our south-west coasts, and by the 30th June this had spread over the whole of our Islands and a considerable portion of the Continent, the system remaining in force until the close of the week. Fine dry weather, therefore, set in very generally, with a decided rise of temperature over our Islands, the maximum readings over our central and southern districts on the 1st July being as high as from 80° to 83°.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 152.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	STATIONS	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	42·1	?	35	?	EASTBOURNE	52·8	?	46	?
OSWALDKIRK (Yorkshire)	36·8	?	31	?	TENBY	38·6*	?	34*	?
WORKSOP	51·4	+16·4	44	+14	NEWQUAY	68·5	?	61	?
THURCASTON (Leicestershire)	59·3	+23·3	51	+19	TORQUAY	56·0*	?	50*	?
MARGATE	46·6	?	41	?	ARLEY COTTAGE (County Cavan)	44·8	?	38	?
WESTBOURNE (Sussex)	49·5 *	?	43*	?	GUERNSEY	59·8*	?	53*	?
BRIGHTON	48·3	?	43	?					

* The values at Westbourne, Tenby, Torquay and Guernsey are obtained by Jordan's Photographic Recorder.

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WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W. R. H. SCOTT, F.R.S., SECRETARY.

By whom Subscriptions, payable in advance, can be received.

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VOL. X. No. 27.] *Third Series.* WEEK ENDING SATURDAY, 8TH JULY, 1893. [*Price 6d.* [*Annual Subscription, post paid*, £1 10s. 0d.

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871-90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the twenty-five years 1866-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90 only BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the ten years 1881-90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

DISTRICTS. (See p. 152.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 1st, 1893. Above 42°	Difference from Mean.	Below 42°	Difference from Mean
	°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts. 0. SCOTLAND, NORTH	81	50	67·1	53·4	59·8	5 above.	125	+52	0	0	1129	+395	485	− 57
1. SCOTLAND, EAST	81	43	65·8	52·2	58·6	2 above,	116	+20	0	0	1253	+266	548	− 21
2. ENGLAND, N.E.	87	47	66·8	52·9	59·3	1 above.	121	+13	0	0	1293	+288	436	− 62
3. ENGLAND, EAST	92	45	75·9	54·0	64·2	4 above.	155	+35	0	0	1579	+367	524	− 37
4. MIDLAND COUNTIES	88	46	78·5	54·5	65·7	6 above.	166	+51	0	0	1721	+488	505	− 47
5. ENGLAND, SOUTH	87	51	74·8	56·6	65·1	5 above.	162	+38	0	0	1741	+416	373	− 43
Principal Grazing, &c., Districts. 6. SCOTLAND, WEST	78	49	71·1	53·9	61·9	5 above.	139	+42	0	0	1403	+382	354	− 63
7. ENGLAND, N.W.	84	50	73·6	56·6	64·5	6 above.	158	+52	0	0	1572	+487	323	− 91
8. ENGLAND, S.W.	85	50	72·6	56·7	64·1	5 above.	155	+43	0	0	1776	+530	246	− 70
9. IRELAND, NORTH	77	42	69·5	53·5	60·9	4 above.	132	+33	0	0	1540	+412	258	−104
10. IRELAND, SOUTH	77	46	70·4	55·0	62·1	4 above.	141	+31	0	0	1752	+447	178	−100
—CHANNEL ISLANDS	80	52	70·1	58·7	34·0	4 above.	154	+34	0	0	1975	+600	70	− 52

Rainfall.

DISTRICTS. (See p. 152.)	For the Week. Number of Rainy Days.	Total Fall.	More or less than the mean for the Week.	From Jan. 1st, 1893. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.
		10ths of in.	10ths of ins.			Ins.	Ins.
Principal Wheat-producing Districts. 0. SCOTLAND, NORTH	3	5	3 less.	109	−13	18·9†	− 4·0
1. SCOTLAND, EAST	2	6	0 (average)	89	− 9	11·6	− 2·9
2. ENGLAND, N.E.	3	17	12 more.	75	−16	9·7	− 2·1
3. ENGLAND, EAST	2	5	1 less.	73	−16	7·9	− 3·9
4. MIDLAND COUNTIES	3	7	1 more.	74	−14	8·6	− 4·8
5. ENGLAND, SOUTH	2	7	2 more.	70	−16	8·5	− 4·3
Principal Grazing, &c., Districts. 6. SCOTLAND, WEST	2	11	2 more.	89	−16	16·3	− 7·2
7. ENGLAND, N.W.	1	7	1 more.	77	−18	11·3	− 3·8
8. ENGLAND, S.W.	2	11	4 more.	72	−26	12·8	− 5·6
9. IRELAND, NORTH	2	3	4 less.	94	−18	12·9	− 3·8
10. IRELAND, SOUTH	3	7	0 (average)	83	−20	14·0	− 4·9
—CHANNEL ISLANDS	3	10	5 more.	76	−30	10·4	− 4·7

Bright Sunshine.

DISTRICTS. (See p. 152.)	For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 1st, 1893. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
Principal Wheat-producing Districts. 0. SCOTLAND, NORTH	35	+ 10	28	+ 9	649	− 49	27	− 2
1. SCOTLAND, EAST	26	?	21	?	794	+ 7	33	+ 1
2. ENGLAND, N.E.	37	− 6	31	− 4	889	+180	37	+ 7
3. ENGLAND, EAST	67	+ 22	59	+20	1089	+234	45	+ 9
4. MIDLAND COUNTIES	54	+ 14	47	+13	1013	+256	42	+ 11
5. ENGLAND, SOUTH	67	+ 24	59	+19	1114	+302	46	+ 12
Principal Grazing, &c., Districts. 6. SCOTLAND, WEST	45	+ 4	39	+ 4	901	+128	37	+ 5
7. ENGLAND, N.W.	55	+ 13	47	+12	913	+148	38	+ 6
8. ENGLAND, S.W.	47	− 1	42	− 1	1181*	+284	49	+ 11
9. IRELAND, NORTH	35	+ 1	30	+ 1	750	+ 17	31	+ 1
10. IRELAND, SOUTH	40	+ 1	35	+ 3	862	+ 28	36	+ 1
—CHANNEL ISLANDS	52	− 2	47	− 3	1350*	+317	56	+ 13

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather during this period varied considerably. During the earlier part of the time it was mostly fine and bright although sharp thunderstorms and heavy rain were experienced in some localities. Towards the end of the week, however, the conditions became very unsettled generally, with severe thunderstorms in many places, and with heavy falls of rain over the northern parts of England.

Temperature was again above the mean, the excess ranging from 1° in England N.E. and 2° in Scotland E., to 5° or 6° in most other parts of the Kingdom. The highest of the maxima were recorded either on the 7th or 8th, when the thermometer rose to 77° in Ireland, to between 78° and 81° in Scotland, and to between 84° and 92° over England. The lowest of the minima occurred, as a rule, during the middle part of the week, when they ranged from 42° in Ireland N., and 43° in Scotland E., to 52° in the Channel Islands.

Rainfall varied greatly; in Scotland N., Ireland N., and England E. it was again less than the normal, and in Scotland E. and Ireland S. just equal to it; in all other districts there was an excess, that in England N.E. being very large.

Bright Sunshine exceeded the mean in nearly all districts, the percentage of the possible duration ranging from 21 to 39 in Scotland, from 30 to 35 in Ireland, and from 31 to 59 in England.

Barometer and Wind.—During the early days of the week the barometer over our Islands was very uniform, and the winds light and generally anticyclonic. Some local irregularities in pressure, however, caused some thunderstorms in the northern parts of England on Monday, and on the following day a small depression advancing northwards from France caused severe thunderstorms and very heavy rains in some of the south-western counties. Towards the end of the period a depression approached our Islands from the Atlantic, and moving north-eastwards and northwards over our western and northern districts, produced severe thunderstorms and heavy rain in nearly all parts of the Kingdom.

* This value has been altered slightly owing to the receipt of additional information for a preceding week.

† The corresponding value in last week's report should read "18·4."

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II.—DATA from which the SUMMARY on page 157 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°				Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	69	50	60·1	50·6	55·0	+ 3·3	91	0	2	0·03	−0·46	*	*	*	*
	Stornoway	70	50	67·0	53·1	59·6	+ 5·9	122	0	3	0·61	−0·09	46·9	+10·3	38	+ 9
	Wick	70	51	62·9	52·4	57·3	+ 2·9	107	0	1	0·05	−0·43	*	*	*	*
	Lairg ⚓	79	51	66·7	52·7	59·2	+ 4·4	120	0	6	0·66	+0·05	*	*	*	*
	Glencarron ⚓	79	51	71·3	54·0	62·1	+ 8·0	141	0	3	0·87	−0·43	*	*	*	*
	Fort Augustus ⚓	81	54	69·4	55·3	61·9	+ 5·7	139	0	4	0·36	−0·30	17·1	?	14	?
	Fort William ⚓	78	52	72·5	55·8	63·6	+ 7·1	151	0	3	1·03	−0·07	39 6	?	32	?
1. SCOTLAND, E.	Nairn	81	51	69·4	53·7	61·0	+ 4·1	133	0	1	0·20	−0·30	*	*	*	*
	Aberdeen	64	51	60·3	52·6	56·2	− 0·3	99	0	2	0·40	−0·12	14·4	−26·7	12	−22
	Braemar ⚓	74	43	68·2	49·7	58 3	+ 4·0	114	0	2	0·69	+0·07	38·0†	?†	31†	?†
	Ochtertyre ⚓	79	50	68·4	53·0	60·2	+ 3·5	127	0	2	0·65	−0·05	*	*	*	*
	Leith	69	50	62·1	52·4	56·9	− 0·8	104	0	2	0·59	0·00	*	*	*	*
	Marchmont ⚓	80	49	66·6	52·0	58·8	+ 2·5	118	0	4	1·21	+0·49	30·3	?	25	?
2. ENGLAND, N.E.	Alnwick Castle	67	51	62·7	53·1	57·6	+ 1·3	109	0	3	1·27	+0·68	*	*	*	*
	Durham	81	49	71·1	52·3	61·1	+ 3·0	134	0	2	2·86	+2·26	32·4	− 3·8	27	− 4
	Shields	65	47	61·7	51·9	56·5	− 0·8	102	0	3	1·34	+0·84	*	*	*	*
	Scarborough ⚓	72	52	64·3	53·3	58·1	− 0·2	113	0	3	1·16	+0·60	*	*	*	*
	York	87	47	77·1	52·7	64·1	+ 4·8	155	0	4	2·40	+1·85				
	Spurn Head	66	52	63·6	54·1	58·5	− 0·2	116	0	3	1·42	+1·05	*	*	*	*
3. ENGLAND, E.	Hillington ⚓	90	50	78·4	54·2	65·5	+ 5·8	165	0	3	1·00	+0·40	61·1	+18·4	53	+14
	Yarmouth	73	53	65·6	56·0	60·5	+ 1·0	130	0	1	0·18	−0·40	*	*	*	*
	Geldeston	85	45	72·7	52·2	61·7	+ 2·0	138	0	3	0·37	−0·13	72·5	+25·7	64	+22
	Cambridge	92	50	83·0	53·9	67·4	+ 6·7	178	0	2	0·17	−0·38	71·0	+28·0	62	+24
	Rothamsted	84	50	80·0	53·8	66·0	+ 6·5	168	0	2	0·59	−0·01	63·5	?	56	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	88	48	79·7	51·6	64·7	+ 4·9	159	0	4	1·06	+0·46	*	*	*	*
	Loughborough	88	52	80·4	56·3	67·5	+ 6·4	179	0	3	0·06	−0·44	*	*	*	*
	Stamford (Ketton Hall)	87	51	78·7	54·6	65·8	+ 5·1	167	0	5	0·68	+0·10	*	*	*	*
	Cheadle ⚓	82	50	76·7	53·5	64·3	+ 7·0	156	0	3	2·20	+1·51	*	*	*	*
	Churchstoke ⚓	82	46	75·6	53·4	63·7	+ 6·1	152	0	1	0·29	−0·28	46·1	+ 6·3	40	+ 5
	Hereford ⚓	85	51	78·8	55·8	66·5	+ 6·6	172	0	3	0·50	−0·02	*	*	*	*
	Cirencester	83	51	78·3	54·7	65·8	+ 7·3	167	0	3	0·50	−0·12	60·9	+19·7	53	+17
	Oxford	84	52	79·7	56·0	67·0	+ 6·8	175	0	4	0·46	−0·09	62·9	+20·5	55	+18
5. ENGLAND, S.	London	87	54	81·0	57·4	68·4	+ 6·3	185	0	2	0·60	+0·07	57·9†	+19·2†	51†	+16†
	North Foreland	84	56	68·6	57·6	62·7	+ 3·1	145	0	2	0·15	?	*	*	*	*
	Strathfield Turgiss ⚓	86	51	81·7	53·5	66·6	+ 5·9	172	0	?	?	?	*	*	*	*
	Dungeness	73	52	69·1	57·7	63·0	+ 2·5	147	0	2	0·78	+0·38	*	*	*	*
	Hastings (St. Leonards)	79	53	74·8	57·1	65·3	+ 4·9	163	0	2	0·53	+0·09	79·0	+29·8	70	+26
	Southampton	81	54	77·0	56·7	66·1	+ 5·1	169	0	2	0·72	+0·23	63·6	+17·6	56	+14
	Hurst Castle	76	55	72·0	58·1	64·6	+ 4·1	158	0	2	1·00	+0·50	*	*	*	*
	Stowell ⚓	80	52	74·5	54·7	63·9	+ 4·3	153	0	3	0·95	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	75	50	71·4	56·1	63·2	+ 6·6	148	0	2	0·83	−0·41	*	*	*	*
	Glasgow	78	52	69·7	53·9	61·3	+ 4·4	135	0	2	0·49	−0·26	34·6	+ 0·7	29	0
	Ardrossan	74	50	69·4	52·7	60·5	+ 3·0	130	0	3	2·13	+1·51	*	*	*	*
	Glenlee ⚓	76	49	73·3	51·4	61·6	+ 5·4	137	0	1	0·67	−0·21	*	*	*	*
	Douglas (Isle of Man)	73	53	71·7	55·4	63·0	+ 6·3	147	0	2	1·27	+0·67	56·2	+ 9·2	48	+ 7
7. ENGLAND, N.W.	Stonyhurst	80	50	73·7	55·1	63·8	+ 5·9	153	0	1	0·27	−0·67	56·6	+17·1	48	+14
	Blackpool ⚓	84	50	75·9	56·5	65·5	+ 7·0	165	0	1	0·96	+0·36	58·7	+17·7	50	+15
	Manchester	83	52	?76·2	56·4	?65·6	? + 7·5	?165	0	1	0·10	−0·69	57·8†	?	50†	?
	Liverpool Obsy. (Bidston)	84	53	75·1	57·9	65·9	+ 6·5	167	0	1	1·40	+0·80	*	*	*	*
	Llandudno ⚓	79	54	71·5	57·1	63·8	+ 4·3	153	0	1	1·21	+0·71	44 8	+ 6·6	39	+ 6
	Holyhead	75	55	69·4	56·6	62·6	+ 4·3	144	0	2	0·33	−0·17	*	*	*	*
8. ENGLAND, S.W.	Llandovery	84	50	78·6	54·9	66·0	+ 6·8	168	0	3	0·56	−0·24	*	*	*	*
	Pembroke	74	56	68·4	57·6	62·6	+ 4·9	144	0	1	0·14	−0·36	43·2	− 5·8	38	− 6
	Bristol (Montpelier)	85	53	79·9	58·1	68·2	+ 8·0	183	0	3	0·39	?				
	Arlington (N. Devon)	78	52	72·3	54·7	62·8	+ 5·2	146	0	1	0·59	−0·39	*	*	*	*
	Cullompton ⚓	80	52	74·8	54·7	64·1	+ 4·7	155	0	3	1·20	+0·58	42·7	+ 0·9	38	+ 1
	Falmouth	73	57	69·1	58·2	63·3	+ 3·8	149	0	2	1·70	+1·02	49·4	− 0·8	44	0
	Plymouth	75	56	69·7	57·4	63·1	+ 2·2	148	0	2	1·63	+1·06	45·6	+ 0·8	41	0
	Prawle Point	74	55	67·7	57·6	62·3	+ 4·1	142	0	2	2·31	+1·84	*	*	*	*
9. IRELAND, N.	Malin Head	74	55	65·1	56·3	60·4	+ 3·8	129	0	2	0·04	?	*	*	*	*
	Londonderry	77	49	74·3	53·6	63·2	+ 5·3	148	0	2	0·17	−0·54	*	*	*	*
	Edenfel (Omagh)	74	46	70·9	52·0	60·8	+ 3·6	132	0	2	0·23	−0·47	*	*	*	
	Belmullet	75	55	68·7	56·4	62·1	+ 5·2	141	0	4	0·49	?	*	*	*	*
	Markree Castle	73	42	70·2	50·9	59·9	+ 3·7	125	0	3	0·61	−0·18	28·9	− 2·8	25	− 2
	Brookeborough	74	45	70·3	51·0	60·0	+ 3·6	126	0	1	0·09	−0·63	*	*	*	*
	Armagh	72	47	69·0	53·7	60·8	+ 3·2	132	0	1	0·10	−0·50	41·4	+ 6·7	35	+ 5
	Donaghadee	72	53	66·4	55·1	60·4	+ 3·5	129	0	2	0·20	−0·34	*	*	*	*
	Edgeworthstown	74	49	70·6	52·5	60·9	+ 3·7	132	0	1	0·47	−0·29	*	*	*	*
10. IRELAND, S.	Dub'in	72	54	70·5	56·9	63·2	+ 3·7	148	0	1	0·19	−0·29	44·4	+ 6·4	38	+ 6
	Parsonstown	74	49	71·9	53·9	62·3	+ 4·6	142	0	1	0·31	−0·31	32·5	− 3·5	28	− 3
	Kilkenny	76	50	71·3	54·7	62·4	+ 4·2	143	0	2	0·35	−0·17	*	*	*	*
	Waterford	77	51	73·4	54·7	63·4	+ 4·5	150	0	3	0·10	−0·52	*	*	*	*
	Roche's Point	70	55	67·6	56·6	61·7	+ 2·3	138	0	2	0·70	−0·03	*	*	*	*
	Valencia	71	51	67·1	54·9	60·6	+ 2·4	130	0	3	0·99	+0·14	44·0	+ 5·0	39	+ 5
	Killarney	75	46	70·2	53·3	61·2	+ 3·6	134	0	6	1·80	?	*	*	*	*
	Foynes	75	52	?70·8	?54·9	?62·3	? + 4·2	?142	0	?4	0·96	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	71	58	68·1	59·3	63·4	+ 4·2	150	0	2	0·44	−0·06	*	*	*	*
	Jersey	80	52	72·0	58·1	64·6	+ 3·6	158	0	3	1·62	+1·11	50·0	− 2·0	45	− 3

Stations marked ⚓ are in connection with the Royal Meteorological Society, and those marked ⚓ with the Scottish Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

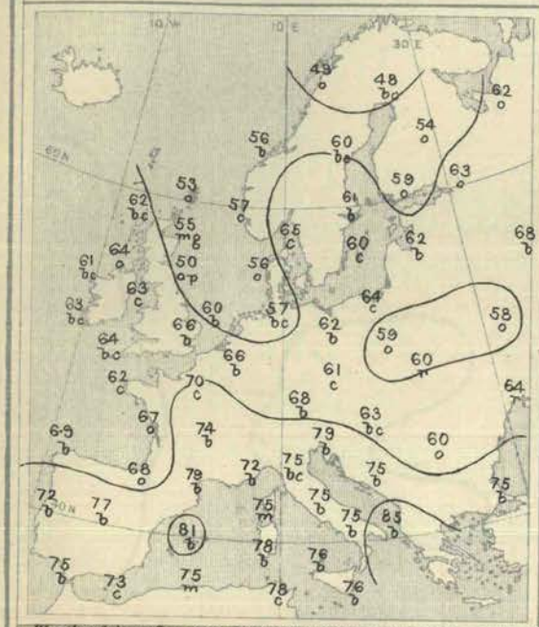
† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row) at the Kew Observatory, and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

NOTE.—The Reports from Newton Reigny have now ceased.

Sunday, 2nd July.

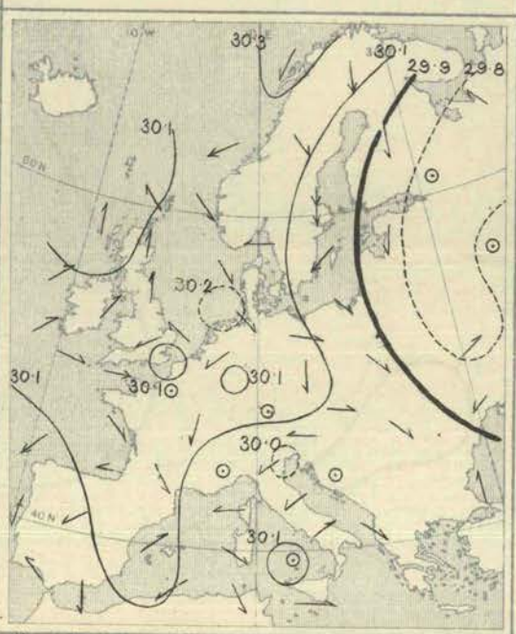
Temperature and Weather.

8 a.m.

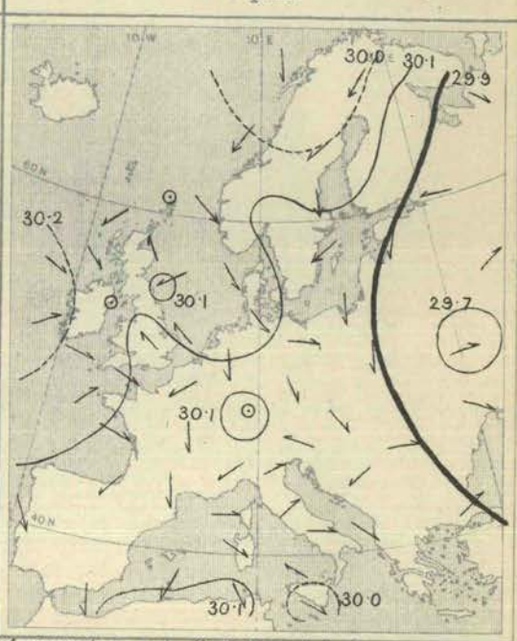


Barometer and Wind.

8 a.m.



6 p.m.



Weather fair or fine over the greater part of our Islands and the Continent, but dull and showery on the north-east coasts of Great Britain. Dull also over Russia and the neighbouring parts of Austria, with rain at Lemberg, considerable falls of rain in Russia later. Thunderstorms over the south of Scotland, the north of England, as well as in some parts of our midland counties, and in the south of France; thunder or lightning (without rain) at some of our south-eastern stations.

Temperature risen in most parts of western and southern Europe, fallen in several of the northern, eastern, and central countries. Morning readings highest, 80° and more at several Mediterranean stations; above 70° over southern Europe generally; below 70° elsewhere. Lowest, 48° at Haparanda and at Uleaborg, 49° at Bodö, 54° at Kuopio, and 55° at Aberdeen. Rising later to 70° or more in the north of Scotland, to between 80° and 85° over the inland parts of England, and to 90° or more at some of the French and Italian stations, and to 104° at Sfax and Laghouat.

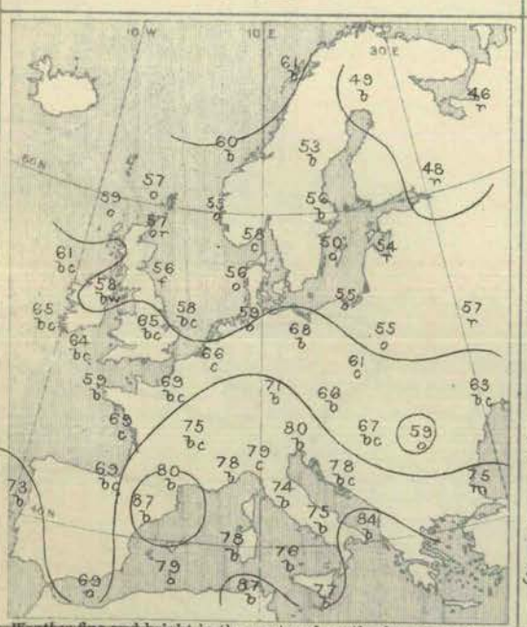
Wind variable on many parts of our western coasts. North-Westerly in the south-west of England and the west of France; Easterly or South-Easterly over the eastern and central parts of England, Southerly in the north and north-east of Great Britain. Moderate to strong from the Northward over Finland and Scandinavia (gales at Helsingfors and Stockholm), light from the North-Westward over Germany, Poland, and Austria; variable in Italy and the south of Russia; North-Easterly or Northerly in Spain and Algeria. Subsequently becoming very variable all over the United Kingdom

Barometer highest, 30·3 ins. and upwards in the north-west of Norway; 30·1 ins. and upwards in a large anticyclone covering a considerable portion of western and northern Europe, but below that level in Scotland, and in a small depression lying over the north-east of France. Lowest of all, 29·8 ins. and less in a large shallow system over the west and north of Russia. Small depression over France subsequently advancing northwards to south-east of England, and barometer falling slightly at most of our eastern and south-eastern stations.

Monday, 3rd July.

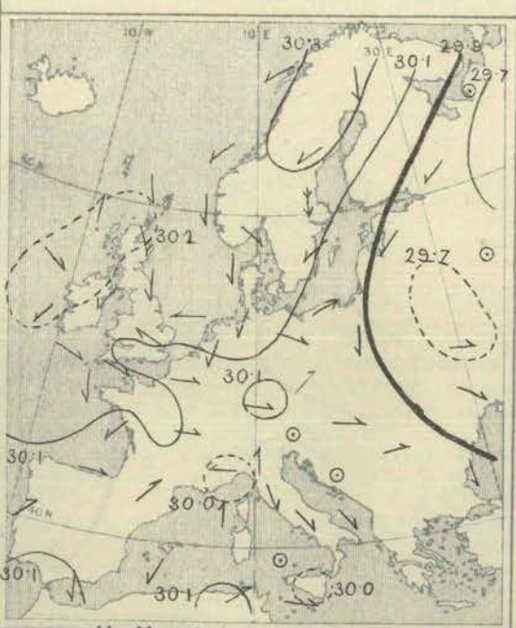
Temperature and Weather.

8 a.m.

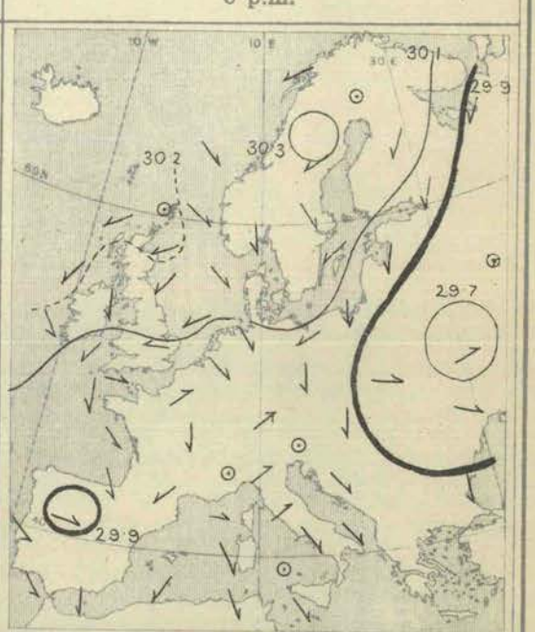


Barometer and Wind.

8 a.m.



6 p.m.



Weather fine and bright in the west and south of our Islands, and over a considerable part of the Continent. Dull in the north and east of Great Britain, foggy at Wick and Shields, rainy at Aberdeen, dull and rainy at many of the Russian stations. Severe thunderstorms and heavy rain during day over the northern parts of England (1·4 ins. of rain measured at York and 1·8 ins. at Stoke-on-Trent), ; thunder heard at the North Foreland, and lightning seen at Lyons, much rain at Kiev, and a small amount at Kharkov.

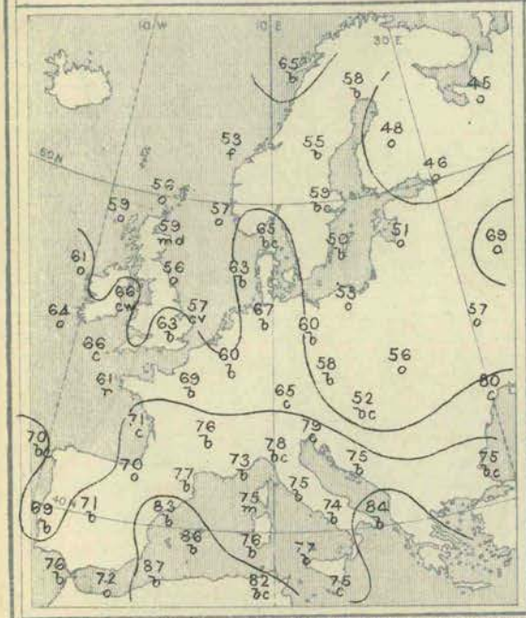
Temperature fallen a little in most places, but risen in the south-west of our Islands, as well as over Austria and northern Italy. Morning readings highest, 87° at Barcelona, 84° at Brindisi, 81° at Toulon and Tunis, and 80° at Trieste, Perpignan, and La Calle; above 70° over southern Europe generally, and ranging between 65° and 71° over the southern parts of England. Lowest, 46° at Archangel, 48° at Uleaborg and St. Petersburg, 49° at Haparanda, and 50° at Wisby. Rising later to between 75° and 80° over the inland parts of England; reaching 91° at Lyons and Perpignan, 95° in some parts of Italy, 100° at Cape Béarn, 104° a Laghouat.

Wind light from the Northward or North-Westward on most parts of our western and northern coasts, but Easterly over the eastern, central, and south-eastern districts, and North-Easterly or Northerly in the west of France, Scandinavia, Denmark, Finland, and the Baltic (a gale at Stockholm); light from the North-Westward or Westward over Poland, Austria, Italy, the south of Russia; chiefly South-Westerly in Spain, variable in Algeria. Subsequently shifting to the North-Eastward or Eastward over the United Kingdom; gale at Stockholm dying down.

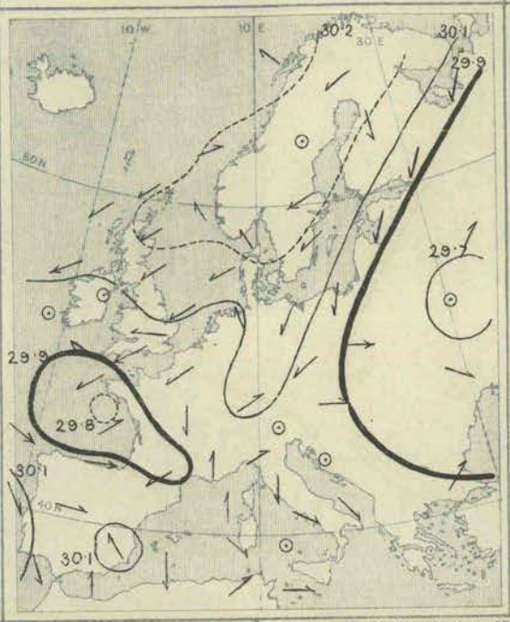
Barometer highest, 30·3 ins. and upwards over northern half of Scandinavia; 30·2 ins. and upwards over Ireland and Scotland, 30·1 ins. and upwards over nearly the whole of north-western Europe. Lowest, 29·7 ins. and less in two large but shallow depressions lying respectively over the northern and south-western parts of Russia; small and very shallow disturbance over the north-east of France. Falling slightly later in almost all countries.

Tuesday, 4th July.

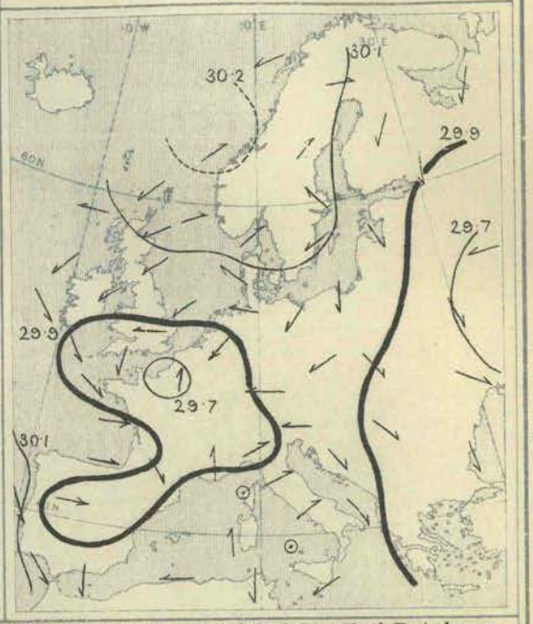
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright in the extreme south-western, southern, south-eastern, and central parts of Europe, as well as over the south-east of England, Denmark, Sweden, and Lapland, cloudy or overcast elsewhere; rainy, thundery, and unsettled over Brittany. Heavy rain later over the Channel, the south of England, and north-west and north of France, with thunder and lightning in all those regions as well as at Lyons. Very slight showers at some of our northern stations, and a large quantity over Russia.

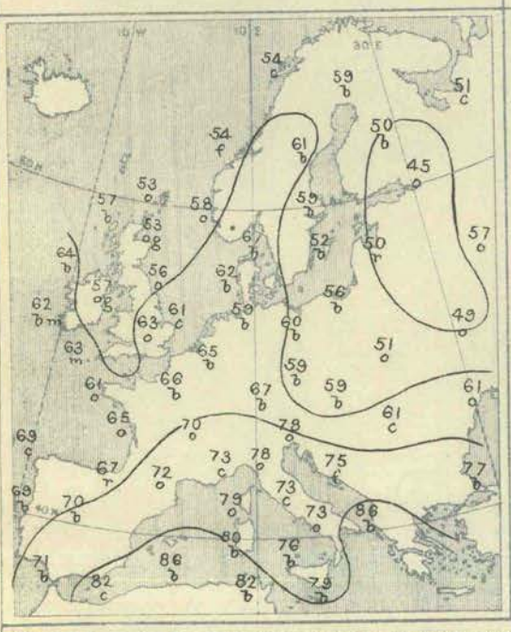
Temperature fallen decidedly over England as well as over central Europe. Morning readings highest, 80° to 87° at many of the Mediterranean stations, and above 70° over southern Europe generally, below 60° over Norway and the north of our Islands, Sweden, and Finland, and, lowest of all, 45° at Archangel, 46° at St. Petersburg, 48° at Kuopio, 51° at Hangö and Riga, and 53° at Aberdeen. Rising later to between 100° and 110° over central Algeria to 90° and more at Lyons, Rome, and Paris, and 86° at Brussels, but failing to reach 75° at any of our own stations.

Wind moderate Northerly to North-Easterly over Finland and the Baltic; North-Easterly over Germany and the Netherlands, and Easterly over the Channel and south of England; Westerly, however, in Spain and the south-west of France, as well as in Austria and Hungary; South-Westerly over southern Russia. Shifting to the Westward later in the north-west of France, and freshening from North-East over the Netherlands, and backing to North over the greater part of England; becoming South-Westerly in Italy.

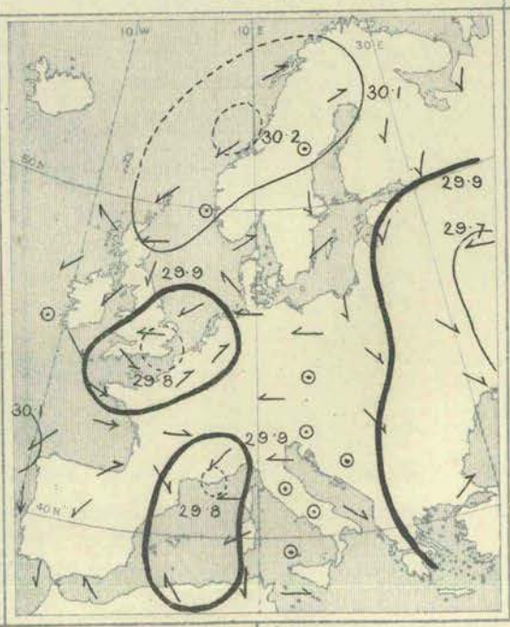
Barometer highest, 30·2 ins. and more to 30·1 ins. in an anticyclone of irregular form covering the whole of Scandinavia and the greater part of north-western Europe, and 30·1 ins. and more to 30·0 ins. over the south-western half of Spain and the southern side of the Mediterranean. Lowest, 29·7 ins. and less in a depression over the south-west of Russia, and about 29·8 ins. in another over the west of France and Bay of Biscay. Latter depression moving north-eastwards later to the Straits of Dover, and a new one appearing off the coast of the Riviera.

Wednesday, 5th July.

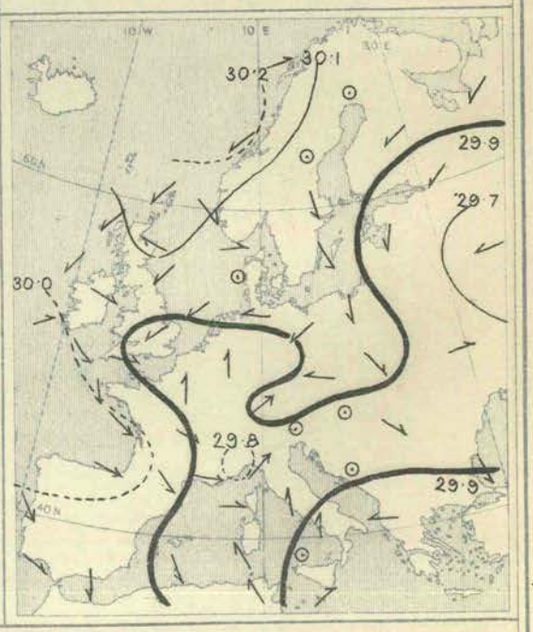
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over Sweden, the Baltic, central and southern Europe, also in Ireland and the west of Scotland; cloudy or overcast elsewhere, with rain in several parts of England; air very "close" in latter regions. Rain falling later at Jersey and also at Belmullet, as well as (locally) in many parts of Europe generally. Sky clearing slowly over England.

Temperature fallen over southern and south-eastern Europe, changed fitfully in the British Islands and their neighbourhood. Highest, 80° to 86° on many parts of the Mediterranean coasts, and above 70° over southern Europe as a whole; above 60° all over France and the greater part of Ireland and England, lower elsewhere. Lowest, 45° at St. Petersburgh, 49° at Kiev, 50° at Riga and Kuopio, 51° at Archangel. Rising later to between 70° and 77° over England, and to 80° and more in the south of France and over Italy, and to over 100° in central Algeria.

Wind light to moderate in force, and variable in direction. Two cyclonic and two anticyclonic circulations shown—the former over our Islands and Russia, the latter over south-western Europe and Scandinavia. Direction Northerly to North-Easterly over Ireland and England, Northerly to North-Westerly over the Baltic, eastern Prussia, and Hungary. Little change later.

Barometer highest, 30·2 ins. to 30·0 ins. over Scandinavia, Scotland, and Ireland, and 30·1 ins. and more to 30·0 ins. over Portugal, the north of Spain, and the south-west of France. Lowest, 29·7 ins. and less in a depression over the southern half of Russia, 29·8 ins. and less in two others—one over the south-east of England and north-east of France, the other over the Riviera. System over our south-eastern counties filling up steadily later, and barometer beginning to fall in Ireland.

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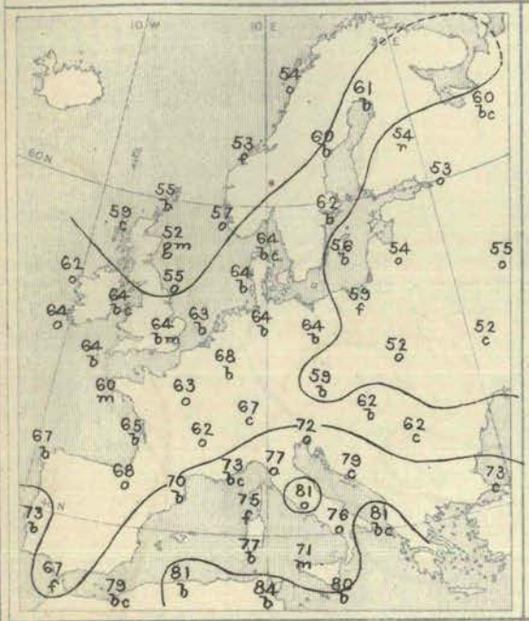
Thursday, 6th July.

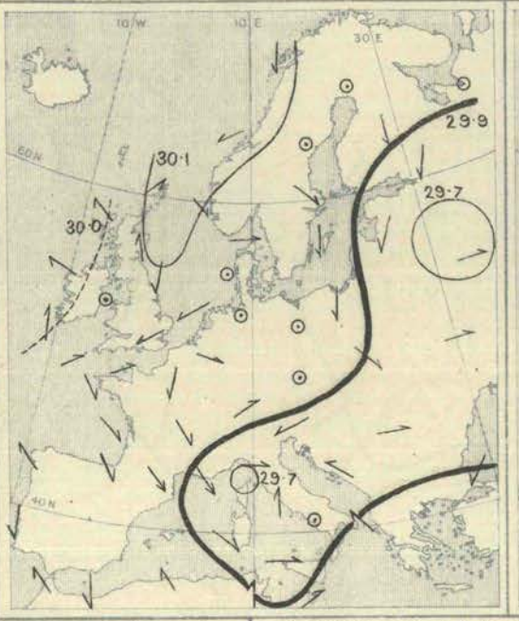
Temperature and Weather.

8 a.m.

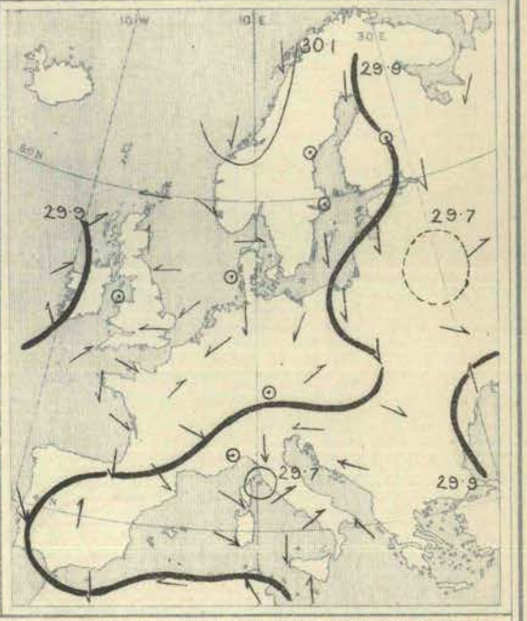


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning fine and bright over the greater part of south-western, central, and eastern Europe, as well as over England, Denmark, and Sweden; cloudy or overcast elsewhere, foggy at Christiansund, rainy in several parts of Finland. Heavy rain at Valencia (Ireland) later, and smaller falls at several of our extreme north-western stations, as well as at Munich, Nice, and some Russian stations; remaining very fine over England and the north and west of France.

Temperature risen fast over England. Morning readings highest, 80° and more at many Mediterranean stations, exceeding 70° over southern Europe generally, exceeding 60° over France, Ireland, England, the Baltic, and Gulf of Bothnia. Lowest, 52° to 55° over the greater part of Russia and Poland, and also on the north-east coasts of Great Britain. Rising during day to 106° at Laghouat, to 90° and more over southern Italy, 86° at Lisbon, between 80° and 84° over many parts of England and Germany, and to 70° and more over Sweden, Denmark, and France.

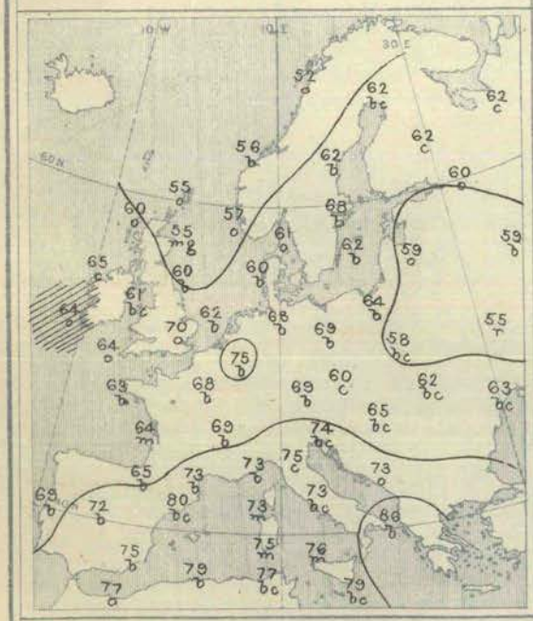
Wind light to moderate in force, variable in direction—mainly Northerly over northern Europe, North-Westerly over Germany, Westerly over the southern half of Russia, Northerly to Easterly over England and the Channel, North-Westerly over France, but becoming South-Easterly to Southerly over Ireland and Scotland. No great change in our Islands later, but the Northerly and North-Westerly wind freshening over Norway, while in Ireland the breeze from the Southward became more decided.

Barometer highest, 30·1 ins. over Norway and the east of Scotland, and exceeding 30·0 ins. over the North Sea, the north of England, the Irish Channel, the Bay of Biscay, and west of France. Lowest, (1) 29·7 ins. and less in a depression over central Russia, and below 29·8 ins. over the Gulf of Genoa and the northern parts of Italy and the Adriatic; (2) about 29·9 ins. off the west of Ireland. Falling a little at our most western and northern stations later and also over Italy, rising very slightly over England, France, and Russia.

Friday, 7th July.

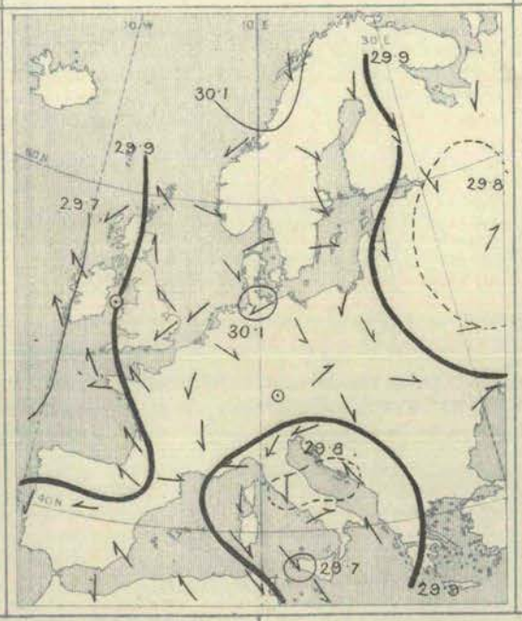
Temperature and Weather.

8 a.m.

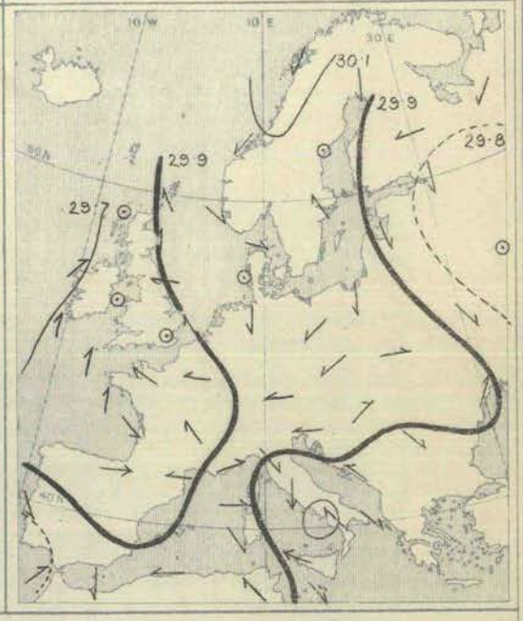


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning cloudy or overcast at the Irish and Scotch stations and over the greater part of Russia; fine and bright, as a whole, over all the northern, central, and southern countries, as well as over England and France. Rain later at the Irish and several of the Scotch stations (1·1 ins. at Ardrossan), and thunder and lightning in many places. A slight fall of rain at Nice, a heavy fall at Naples, and a little in the south of Russia.

Temperature risen again over England and also over France. Morning readings highest, 80° to 86° at some Mediterranean stations, and above 70° over southern Europe generally, lower elsewhere. Lowest, 52° at Christiansund, 53° at Sumburgh Head and at Kiev, 58° at Wick, and also at Breslau and Warsaw. Rising later to between 85° and 90° in many parts of Algeria, Italy, and also of England, France, and Germany, and to 77° on the Danish coasts and at Wisby.

Wind Easterly to Southerly over the United Kingdom, and blowing very strongly at Valencia; Easterly over the Netherlands, Easterly to Northerly over France and Spain. Northerly to North-Westerly over the Baltic and north Germany, Westerly over south Germany and the south of Russia; North-Easterly in the north of Italy, North-Westerly in the south, and at Cagliari, Palermo, and Malta. Falling light at all Irish stations later, and becoming Westerly in the south-west of France; little change elsewhere.

Barometer highest, 30·1 ins. and more in the north-west of Norway, and about 30·0 ins. over the whole of Norway, Denmark, the North Sea, and north Germany. Lowest, 29·8 ins. and less in two large shallow depressions—one over Russia, the other over Italy and the Adriatic; 29·7 ins. off the west of Ireland. Falling all over Great Britain and the North Sea later—unsteady at Valencia.

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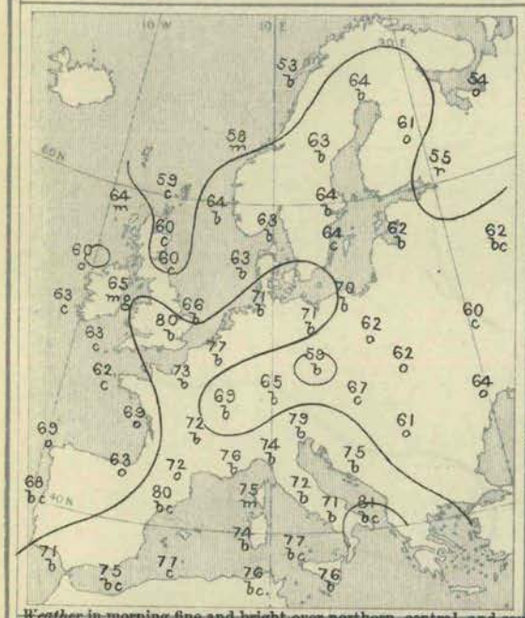
Saturday, 8th July.

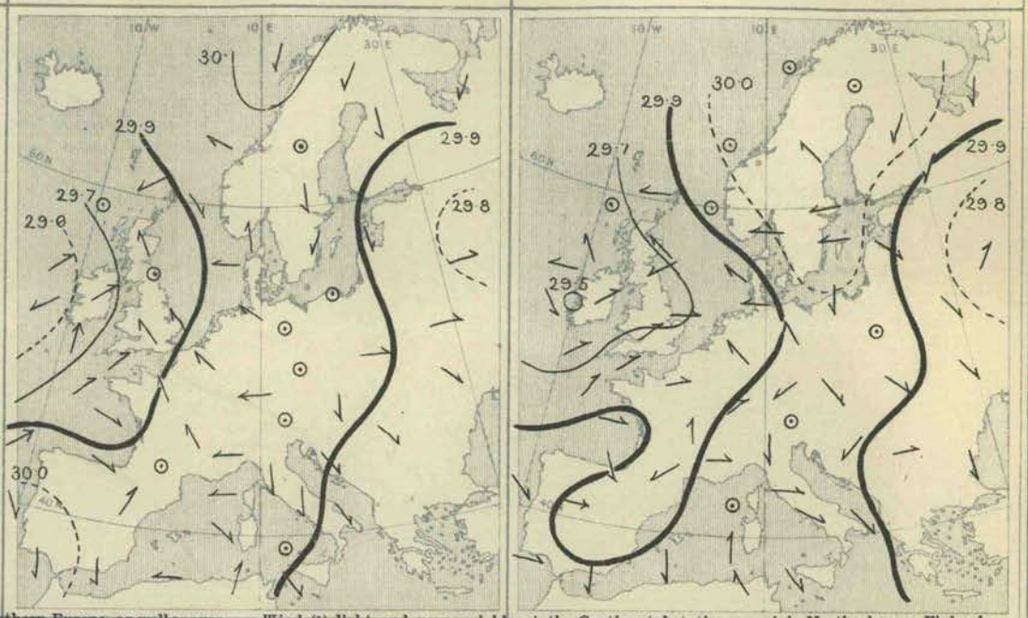
Temperature and Weather. 8 a.m.



Weather in morning fine and bright over northern, central, and southern Europe, as well as over the eastern and south-eastern counties of England; dull and unsettled over the western and northern parts of our Islands, with rain, thunder, and lightning in some places, dull also over south-eastern Europe. The rainy unsettled weather in the north and west spreading all over England later, with severe thunderstorms in places, and more than an inch of rain at Shields, Spurn Head, Ardrossan, and Liverpool; thunderstorms at some Continental stations, also 0·8 ins. of rain at Clermont and Helsingfors.

Temperature risen decidedly over the British Isles and France—unusually high in London at 8·0 a.m. Morning readings highest, 81° at Brindisi, 80° at London, 79° at Cambridge, exceeding 70° at the Mediterranean stations and over our midland and eastern counties generally. Lowest, 53° at Bodö, 54° at Archangel, 55° at St. Petersburg, 59° at Memel, Sumburgh Head, and Cracow. Rising later to between 85° and 92° over England, to 96° (locally) at Elsing, Norfolk, to 93° at Brussels and Belfort, and to 102° at Laghouat, but not touching 90° at any of the Italian stations, and scarcely exceeding 80° over Austria-Hungary.

Barometer and Wind. 8 a.m. 6 p.m.



Wind (1) light and very variable at the Continental stations—mainly Northerly over Finland and the Baltic, Westerly over Hungary and southern Russia, but Easterly over western Germany and the east and south of France. (2) South-Westerly over the Bay of Biscay and north of France, Southerly to Easterly over Great Britain and the east and north of Ireland, North-Easterly at Valencia. Freshening from the Southward over England later, and becoming more Westerly in the west of France. [Local squalls of considerable force reported by the newspapers in some places—notably off the Lincolnshire coast.]

Barometer highest, (1) 30·0 ins. and more over Lapland, Finland, and the greater part of Scandinavia, and exceeding 29·9 ins. in a band extending thence in a southerly direction across central Europe to the Adriatic, Italy, and the Mediterranean; (2) exceeding 30·0 ins. over Portugal and the south-west of Spain. Lowest, (1) 29·6 ins. and less in a depression over Ireland, and below 29·9 ins. in a series of secondary disturbances lying over England and the western half of the North Sea. (2) Below 29·8 ins. over central Russia. Depression over our Islands moving north-eastwards later and spreading eastwards considerably.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are show by arrows, which are drawn flying *with the wind*, the force is indicated thus : ⇛⟶ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breese: and ⊙ = a calm. In the left-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds: o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Germany, Sweden, and Norway, and 7 a.m. in France, Algeria, Italy, Austria, and Russia; that for 6 p.m. is prepared from observations made at 6 p.m. in the British Islands and France, 7 p.m. in Algeria, 8 p.m. in Sweden and Norway, Germany, and Austria, and 9 p.m. in Russia, Belgium, and Italy. The time indicated in each case is the standard time for each country.

GENERAL NOTES.

During this week there has been a decided and important alteration in the weather over Europe. At first, pressure was highest over the British Islands and the north-western countries, lowest over Russia, so that, although South-Westerly breezes of little force were felt over Scotland and our north-west coasts, the general drift of the wind over north-western Europe was Northerly, and in the south of England North-Easterly. On Tuesday, pressure gave way over France, and a small depression brought large quantities of rain to the south of England, but this soon ceased, and with bright weather temperature became very high over England. Friday, however, brought about a decided giving way of our western pressures, and, as the week advanced, very rainy weather and South-Westerly to South-Easterly winds were spreading over our Islands and their neighbourhood, thunderstorms set in all over England, and the general appearance was becoming very unsettled. Pressure was at the same time low over Russia and the Mediterranean also, but somewhat high over Scandinavia, Denmark, and Germany.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 158.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	STATIONS	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	19·6	?	16	?	EASTBOURNE	72·4	?	64	?
OSWALDKIRK (Yorkshire)	41·4	?	35	?	TENBY	46·0*	?	40*	?
WORKSOP	45·9	+10·7	40	+ 9	NEWQUAY	51·0	?	46	?
THURCASTON (Leicestershire)	51·9	+15·4	45	+13	TORQUAY	53·0*	?	47*	?
MARGATE	60·5	?	54	?	ARLEY COTTAGE (County Cavan)	35·4	?	30	?
WESTBOURNE (Sussex)	66·4 *	?	59*	?	GUERNSEY	54·5*	?	49*	?
BRIGHTON	65·6	?	58	?					

* The values at Westbourne, Tenby, Torquay and Guernsey are obtained by Jordan's Photographic Recorder.

ERRATUM.—The Bright Sunshine values for Tenby in last week's Report should read "47·6" and "41" and not "38·6" and "34."

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WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W. R. H. SCOTT, F.R.S., SECRETARY.

By whom Subscriptions, payable in advance, can be received.

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VOL. X. No. 28.] *Third Series.* WEEK ENDING SATURDAY, 15TH JULY, 1893. [*Price* 6*d.* [*Annual Subscription, post paid*, £1 10*s.* 0*d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871-90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the twenty-five years 1866-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the ten years 1881-90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

DISTRICTS. (See p. 158.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 1st, 1893. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
	°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts. 0. SCOTLAND, NORTH	72	46	62·1	52·0	56·7	2 above.	103	+25	0	0	1232	+419	485	− 57
1. SCOTLAND, EAST	72	45	62·5	51·4	56·6	0 (average)	102	+ 2	0	0	1355	+266	648	− 21
2. ENGLAND, N.E.	72	48	63·0	52·9	57·6	1 below.	109	− 3	0	0	1402	+282	436	− 62
3. ENGLAND, EAST	77	46	66·8	54·1	60·0	0 (average)	126	+ 1	0	0	1705	+365	524	− 37
4. MIDLAND COUNTIES	74	44	66·4	53·1	59·3	0 (average)	121	+ 2	0	0	1842	+490	505	− 47
5. ENGLAND, SOUTH	75	47	67·3	55·7	61·1	0 (average)	134	+ 6	0	0	1875	+420	373	− 43
Principal Grazing, &c., Districts. 6. SCOTLAND, WEST	73	47	64·6	52·9	58·4	1 above.	115	+14	0	0	1518	+397	354	− 64
7. ENGLAND, N.W.	73	49	65·5	54·5	59·6	1 above.	123	+12	0	0	1695	+500	323	− 91
8. ENGLAND, S.W.	71	44	65·9	54·9	60·0	1 above.	126	+10	0	0	1902	+542	246	− 70
9. IRELAND, NORTH	75	46	64·7	52·4	58·1	1 above.	113	+11	0	0	1652*	+423	258	−104
10. IRELAND, SOUTH	73	45	65·3	53·6	59·1	0 (average)	120	+ 8	0	0	1872	+459	178	−100
—CHANNEL ISLANDS	70	56	66·6	57·8	51·9	1 above.	139	+15	0	0	2114	+614	70	− 52

Rainfall. Bright Sunshine.

DISTRICTS. (See p. 158.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the mean for the Week.	From Jan. 1st, 1893. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 1st, 1893. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
		10ths of in.	10ths of ins.			Ins.	Ins.								
Principal Wheat-producing Districts. 0. SCOTLAND, NORTH	3	3	5 less.	112	−15	19·2	− 4·5	14	− 6	11	− 5	663	− 67	26	− 3
1. SCOTLAND, EAST	4	5	2 less.	93	−10	12·1	− 3·0	16	− 21	13	−19	810	− 17	32	− 1
2. ENGLAND, N.E.	5	5	1 less.	80	−15	10·2	− 2·2	20	− 19	18	−16	913*	+164	33	+ 6
3. ENGLAND, EAST	5	9	3 more.	78	−15	8·8	− 3·6	31	− 14	27	−12	1120	+221	44	+ 8
4. MIDLAND COUNTIES	5	12	6 more.	79	−13	9·8	− 4·2	24	− 16	21	−14	1037	+242	41	+ 9
5. ENGLAND, SOUTH	5	13	8 more.	75	−15	9·8	− 3·5	36	− 7	32	− 9	1150	+296	46	+ 12
Principal Grazing, &c., Districts. 6. SCOTLAND, WEST	4	4	4 less.	93	−16	16·7	− 7·7	29	− 11	25	− 9	930	+117	37	+ 5
7. ENGLAND, N.W.	5	12	5 more.	82	−17	12·5	− 3·3	22	− 15	19	−13	935	+130	37	+ 5
8. ENGLAND, S.W.	5	17	10 more.	77	−25	14·5	− 4·6	43	− 4	38	− 4	1224	+283	49	+ 12
9. IRELAND, NORTH	4	13	6 more.	98	−19	14·2	− 3·3	28	− 2	24	− 1	778	+ 14	31	+ 1
10. IRELAND, SOUTH	5	11	4 more.	88	−20	15·1	− 4·4	25	− 12	22	− 9	887	+ 15	35	0
—CHANNEL ISLANDS	5	9	3 more.	81	−29	11·3	− 4·3	54	+ 4	49	+ 3	1404	+316	56	+ 12

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather was exceedingly changeable and showery, with thunderstorms in nearly all parts of the Kingdom, and with heavy falls of rain locally.

Temperature was slightly above the mean in nearly all the Grazing districts, as well as in Scotland N.; in other localities it was either equal to or a trifle below the normal. The highest readings were registered on the 9th, 10th, or 11th, when the thermometer exceeded 70° in most districts and reached 77° in England E. The lowest readings occurred, as a rule, on the 15th, when the thermometer fell below 50° in all districts excepting the Channel Islands, where the lowest reading was 56°. In the Midland Counties and England S.W. the absolute minimum was as low as 44°.

Rainfall amounted to less than the average in Scotland and the north-east of England, but in all other districts a considerable excess was shown. In the Midland Counties the total fall was twice as much, and in England S. and England S.W. more than twice as much as the normal, the excess in the two last mentioned districts being due to a heavy fall which occurred on the 15th or early on the 16th. In Eastbourne and its immediate vicinity the amount of rain which fell between 7 a.m. and 1 p.m. on the 16th varied between 2 and 3 inches, the heaviest fall in a short period being at the rate of about 2 ins. per hour.

Bright Sunshine was less than the average in all districts excepting the Channel Islands, the deficiency being in many localities very considerable. The percentage of the possible duration ranged from 11 in Scotland N. and 13 in Scotland E. to 32 in England S., 38 in England S.W., and to as much as 49 in the Channel Islands.

Barometer and Wind.—During the earlier half of the week two depressions passed over our Islands. The first of these advanced over Ireland and the south of Scotland on the morning of the 9th, and subsequently travelled away to the north-westward. The second appeared off the mouth of the St. George's Channel on the 11th, and advanced closely along the south of England, the system ultimately travelling away to Denmark and the Baltic. In the rear of the latter disturbance, the winds which had previously been rather variable, shifted to the North-Westward or Northward, but at the close of the week, when fresh depressions were beginning to appear over our west and south-west coasts, a general backing to the South-Westward or Southward was reported.

* This value has been altered slightly owing to the receipt of additional information for a preceding week.

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II.—DATA from which the SUMMARY on page 163 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°				Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	64	47	58·6	50·6	54·3	+ 2·2	86	0	1	0·03	−0·47	*	*	*	*
	Stornoway	69	48	61·9	52·1	56·7	+ 2·4	103	0	3	0·21	−0·49	27·7	− 6·3	23	− 5
	Wick	65	48	60·0	51·7	55·6	+ 0·8	95	0	4	0·21	−0·29	*	*	*	*
	Lairg Ş	71	47	63·3	51·4	57·0	+ 1·7	105	0	2	0·06	−0·59	*	*	*	*
	Glencarron Ş	71	46	63·4	52·0	57·3	+ 2·9	107	0	3	0·30	−1·06	*	*	*	*
	Fort Augustus Ş	72	50	63·7	52·9	57·9	+ 1·4	111	0	6	0·86	+0·16	4·5	?	4	
	Fort William Ş	70	50	63·9	53·4	58·3	+ 1·6	114	0	3	0·47	−0·71	8·6	?	7	?
1. SCOTLAND, E.	Nairn	72	47	65·0	51·6	57·8	+ 0·6	111	0	3	0·27	−0·28	*	*	*	*
	Aberdeen	63	49	59·6	52·4	55·8	− 1·0	97	0	3	0·66	+0·06	16·7	−23·3	14	−19
	Braemar Ş	64	45	59·5	49·4	54·1	− 0·4	85	0	5	0·39	−0·26	16·2	?†	13†	?†
	Ochtertyre Ş	72	45	66·3	50·4	57·8	+ 0·8	111	0	3	0·84	+0·11	*	*	*	*
	Leith Ş	69	50	62·0	53·0	57·2	− 1·1	106	0	4	0·31	−0·31	*	*	*	*
	Marchmont Ş	70	49	62·6	51·7	56·8	+ 0·1	104	0	4	0·53	−0·24	22·5	?	19	?
2. ENGLAND, N.E.	Alnwick Castle	65	48	61·0	51·3	55·8	− 1·0	97	0	4	0·41	−0·21	*	*	*	*
	Durham	72	48	64·1	51·2	57·2	− 1·5	106	0	4	0·55	−0·10	13·1	−23·3	11	−21
	Shields	66	49	61·9	52·0	56·6	− 1·1	102	0	4	0·16	−0·42	*	*	*	*
	Scarborough Ṁ	72	49	63·1	53·9	58·2	− 0·7	113	0	5	0·59	−0·02	*	*	*	*
	York	71	49	65·4	54·1	59·4	− 0·2	122	0	5	0·55	−0·04	24·3	−12·5	21	−10
	Spurn Head	69	49	62·3	55·0	58·4	− 1·2	115	0	5	0·48	+0·09	*	*	*	*
3. ENGLAND, E.	Hillington Ṁ	75	49	66·0	53·7	59·4	− 0·9	122	0	4	1·63	+0·98	29·9	−13·1	26	−13
	Yarmouth	68	50	64·4	56·3	60·1	0·0	127	0	6	0·81	+0·19	*	*	*	*
	Geldeston	73	48	68·1	54·1	60·6	+ 0·2	130	0	5	0·44	−0·15	43·8	− 3·0	39	− 3
	Cambridge	77	49	69·3	53·7	61·0	− 0·4	133	0	4	0·81	+0·26	20·4	−23·4	18	−21
	Rothamsted	71	46	66·0	52·9	59·0	− 1·0	119	0	5	0·90	+0·28	28·1	?	25	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	74	48	66·6	51·4	58·5	− 1·7	116	0	5	1·26	+0·64	*	*	*	*
	Loughborough	74	50	66·9	53·9	60·0	− 1·4	126	0	5	1·20	+0·69	*	*	*	*
	Stamford (Ketton Hall)	74	49	67·9	53·7	60·3	0·0	128	0	4	0·74	+0·14	*	*	*	*
	Cheadle Ṁ	68	49	63·5	52·1	57·4	− 0·3	108	0	6	1·66	+0·96	*	*	*	*
	Churchstoke Ṁ	68	44	64·9	51·9	58·0	+ 0·2	112	0	5	0·91	+0·33	26·8	−12·9	23	−12
	Hereford Ṁ	69	49	66·9	53·7	59·8	− 0·4	125	0	6	1·28	+0·74	*	*	*	*
	Cirencester	71	49	66·6	53·3	59·5	+ 0·3	123	0	6	1·17	+0·50	27·6	−13·7	24	−13
	Oxford	71	52	67·9	54·9	61·0	+ 0·4	133	0	4	1·56	+0·99	30·2	−12·4	27	−11
5. ENGLAND, S.	London	75	47	68·3	55·4	61·4	− 0·9	136	0	6	0·44	−0·09	26·0†	−13·2†	23†	−13†
	North Foreland	71	54	67·0	56·7	61·5	+ 1·0	137	0	2	0·72	?	*	*	*	*
	Strathfield Turgiss Ṁ	73	48	69·0	52·1	60·0	− 1·2	126	0	6	1·29	+0·77	*	*	*	*
	Dungeness	70	49	66·7	56·6	61·3	+ 0·2	135	0	4	0·09	−0·33	*	*	*	*
	Hastings (St. Leonards)	70	52	66·6	56·3	61·1	0·0	134	0	5	0·80	+0·32	44·6	− 5·5	40	− 5
	Southampton	71	52	68·8	56·3	62·1	+ 0·5	141	0	4	2·15	+1·60	36·4	− 9·8	33	− 9
	Hurst Castle	70	53	67·3	57·6	62·1	+ 1·1	141	0	5	2·52	+2·02	*	*	*	*
	Stowell Ṁ	67	52	64·8	54·8	59·5	− 0·4	123	0	7	2·06	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	71	47	64·8	51·7	57·8	+ 0·9	111	0	3	0·51	−0·74	*	*	*	*
	Glasgow	70	50	64·4	53·7	58·7	+ 1·4	117	0	2	0·09	−0·70	17·5	−14·2	15	−13
	Ardrossan	71	50	64·2	53·4	58·5	+ 0·8	116	0	5	0·56	−0·09	*	*	*	*
	Glenlee Ş	73	47	65·6	52·0	58·3	+ 1·8	114	0	5	0·62	−0·31	*	*	*	*
	Douglas (Isle of Man)	70	48	63·8	53·8	58·5	+ 1·5	116	0	5	0·44	−0·23	39·4	− 5·9	34	− 6
7. ENGLAND, N.W.	Stonyhurst	69	51	63·9	53·2	58·2	− 0·2	113	0	6	2·61	+1·61	17·5	−20·7	15	−19
	Blackpool Ṁ	70	53	66·4	55·1	60·3	+ 1·2	128	0	6	1·20	+0·51	27·3	−13·1	24	−11
	Manchester	70	49	66·4	53·3	59·4	+ 1·0	122	0	6	1·72	+0·89	16·8†	?	15†	?
	Liverpool Obsy. (Bidston)	73	52	66·7	54·9	60·4	+ 0·7	129	0	5	0·81	+0·16	*	*	*	*
	Llandudno Ṁ	68	52	64·6	54·6	59·3	− 0·4	121	0	4	0·70	+0·15	26·0	−11·5	23	−10
	Holyhead	68	53	64·7	55·6	59·8	+ 1·1	125	0	5	0·19	−0·33	*	*	*	*
8. ENGLAND, S.W.	Llandovery	70	44	68·1	53·7	60·4	+ 1·1	129	0	6	1·75	+0·89	*	*	*	*
	Pembroke	67	54	64·6	56·0	60·0	+ 1·7	126	0	4	1·14	+0·60	50·6	+ 3·8	45	+ 3
	Bristol (Montpelier)	71	53	68·4	56·4	62·0	+ 1·4	140	0	5	1·08	?				
	Arlington (N. Devon)	66	46	63·9	52·7	57·9	− 0·3	111	0	4	2·31	+1·27	*	*	*	*
	Cullompton Ṁ	70	45	66·7	54·3	60·1	+ 0·5	127	0	6	2·80	+2·15	19·9	−20·7	18	−18
	Falmouth	67	53	65·5	55·5	60·2	+ 0·4	127	0	4	1·54	+0·84	54·8	+ 6·1	49	+ 6
	Plymouth	67	49	65·2	55·7	60·1	− 1·1	127	0	6	1·45	+0·85	40·2	− 3·7	36	− 4
	Prawle Point	68	49	65·0	54·9	59·6	+ 0·8	123	0	6	1·53	+1·03	*	*	*	*
9. IRELAND, N.	Malin Head	64	51	60·6	54·4	57·3	+ 0·3	107	0	2	2·83	?	*	*	*	*
	Londonderry	75	50	67·8	51·6	59·1	+ 1·0	120	0	5	1·33	+0·55	*	*	*	*
	Edenfel (Omagh)	75	46	66·9	51·3	58·6	+ 1·2	116	0	3	1·16	+0·44	*	*	*	*
	Belmullet	65	51	63·4	54·6	58·7	+ 1·3	117	0	4	0·82	?	*	*	*	*
	Markree Castle	71	46	64·7	51·6	57·7	+ 1·3	110	0	5	0·25	−0·52	27·7	− 2·2	24	− 2
	Brookeborough	71	49	64·7	51·3	57·5	+ 0·7	109	0	6	1·86	+1·08	*	*	*	*
	Armagh	70	46	65·7	50·5	57·6	0·0	109	0	5	0·66	−0·02	32·3	− 0·2	28	0
	Donaghadee	68	53	63·1	55·0	58·8	+ 1·6	118	0	3	0·99	+0·39	*	*	*	*
	Edgeworthstown	68	47	65·0	51·6	57·8	+ 0·4	111	0	4	2·05	+1·25	*	*	*	*
10. IRELAND, S.	Dublin	68	52	65·3	54·8	59·7	− 0·2	124	0	5	1·39	+0·87	22·2	−14·6	19	−13
	Parsonstown	71	46	66·3	50·7	58·0	− 0·2	112	0	4	0·91	+0·26	14·7	−19·4	13	−17
	Kilkenny	68	45	65·6	52·0	58·3	− 0·1	114	0	6	1·09	+0·54	*	*	*	*
	Waterford	73	46	69·2	52·1	60·1	+ 0·8	127	0	6	0·99	+0·34	*	*	*	*
	Roche's Point	69	52	65·0	55·3	59·8	+ 0.1	125	0	4	1·55	+0·81	*	*	*	*
	Valencia	67	52	63·9	55·9	59·6	+ 1·1	123	0	5	0·74	−0·13	39·1	+ 2·3	35	+ 3
	Killarney	66	46	62·5	53·1	57·5	− 0.5	109	0	7	1·01	?	*	*	*	*
	Foynes	66	51	64·6	55·2	59·6	+ 1·2	123	0	5	0·76	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	68	56	66·0	56·9	61·1	+ 1·4	134	0	5	1·37	+0·84	*	*	*	*
	Jersey	70	56	67·1	58·6	62·6	+ 0·9	144	0	5	0·34	−0·19	56·0	+ 4·1	51	+ 3

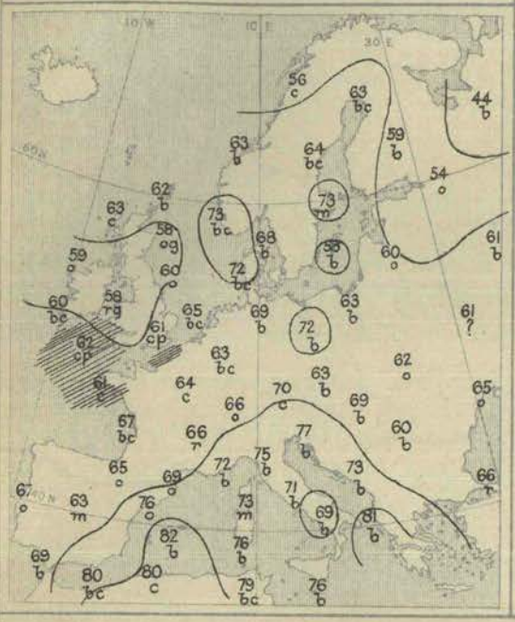
Stations marked Ṁ are in connection with the Royal Meteorological Society, and those marked Ş with the Scottish Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

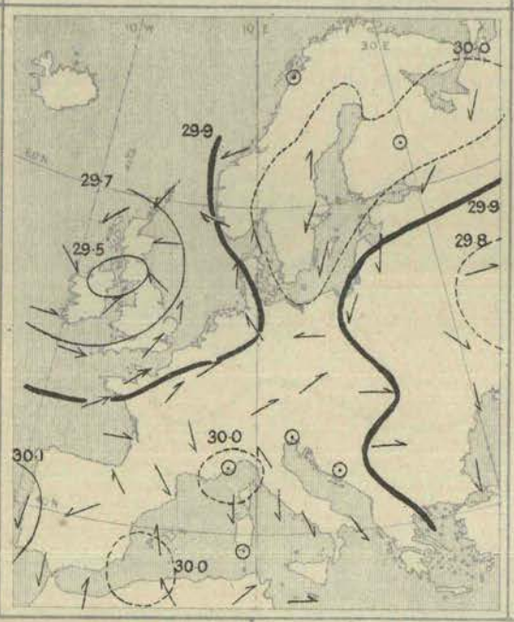
† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row) at the Kew Observatory, and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

Sunday, 9th July.

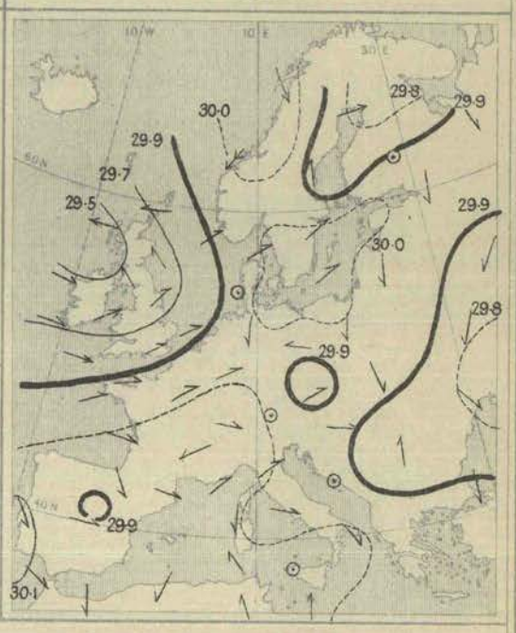
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning clear and bright over northern Europe, the Baltic, Germany, Austria, Italy, and the Mediterranean, cloudy, changeable, squally, and showery over the British Islands (especially the eastern half), but inclined to clear in the south-west; dull over southern Russia, rainy at Constantinople. Nearly 3 ins. of rain at Malin Head later, and 0·9 in. at Donaghadee; showers in most other places, and a considerable fall at Munich, as well as at some of the Russian stations. Thunder and lightning over the greater part of England.

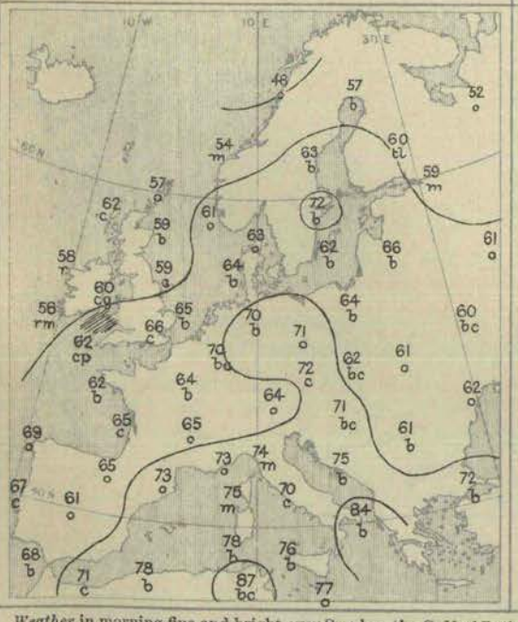
Temperature falling decidedly over England and the Netherlands, rising over eastern Germany and the south of Russia. Morning readings highest, 81° at Brindisi, and 70° to 80° on the Mediterranean coasts as a whole; exceeding 70° in many parts of Germany, and at Stockholm—lower elsewhere. Lowest, 44° at Archangel, 55° at Malin Head, and below 60° at several of our northern stations. Slightly exceeding 70° over many parts of England later, exceeding 80° in many parts of central and southern Europe, and touching 91° at Berlin and Rome.

Wind (1) very light and variable over the Continent; (2) Westerly over Ireland, Wales, and the west of England (strong in places), Southerly, fresh to strong, over the east of England; South-Easterly to Easterly, light to moderate, over Scotland; (3) light but cyclonic over the Riviera and northern parts of the Mediterranean. Blowing strongly in squalls from South-West over England later, remaining South-Easterly to Easterly in Scotland. Fresh Northerly gale setting in at Christiansund.

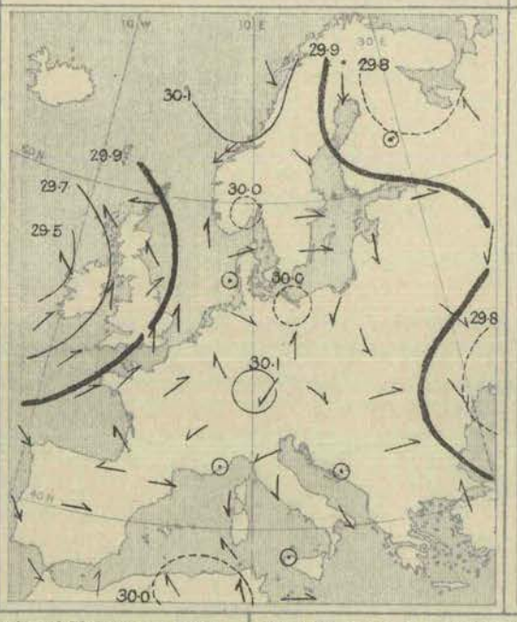
Barometer highest, (1) 30·1 ins. and more to 30·6 ins. over Spain, the Mediterranean, and (as a whole) the southern parts of France and Germany; (2) 30·0 ins. and more over Sweden, the Baltic, and Finland. Lowest, 29·5 ins. to 29·6 ins. over the north-western parts of our Islands, below 29·8 ins. over the south-east of Russia, and rather below 30·0 ins. over the Gulf of Genoa and adjacent parts of the Mediterranean. Gradients moderate. Depression in north-west moving north-westward later, and barometer rising over England. Shallow disturbance appearing over Lapland.

Monday, 10th July.

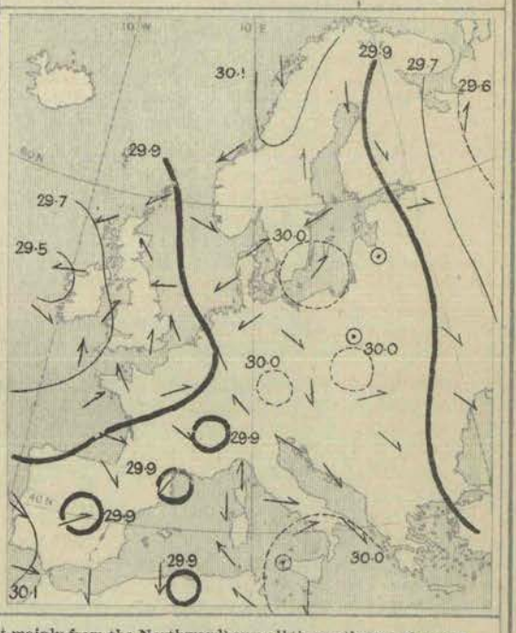
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over Sweden, the Gulf of Bothnia and Finland, the Baltic, and at many stations in central and southern Europe, cloudy more or less both over the eastern and western countries, rainy at our own western and south-western stations, as well as at Kharkov; a thunderstorm prevalent at Kuopio. Rain later at our northern and western stations, as well as over France (1·2 ins. at Lyons, 0·7 in. at Scilly) and thunderstorms occurring over the north-eastern parts of Great Britain and at Stornoway, as well as in some parts of France and Austria.

Temperature risen over Austria, fallen over north Germany and many parts of France. Morning readings highest, 87° at La Calle, 84° at Brindisi, and exceeding 70° on the Mediterranean coasts generally, as well as over Austria, and at Stockholm; exceeding 60° over England and the greater part of Russia. Lowest, 48° at Bodö, 52° at Archangel, 57° to 59° on the extreme north-east coasts of Great Britain, 58° in the north-west of Ireland. Rising later to 77° at Wick, and to between 70° and 75° over the inland parts of Denmark, England, and at Nairn. Exceeding 80° in many parts of central and southern Europe, and reaching 91° at Rome.

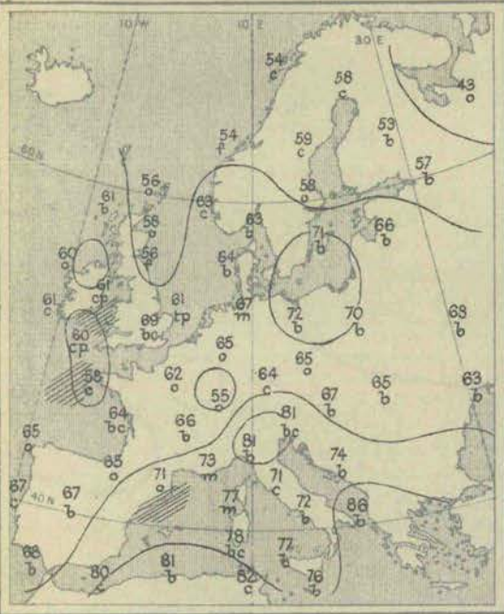
Wind very light and variable (but mainly from the Northward) over all the northern and eastern parts of Europe; South-Westerly to Southerly over Brittany and the southern parts of England and Ireland, South-Easterly in Scotland; North-Westerly (strong) in Portugal, South-Easterly on the east coast of Spain. Becoming more Easterly in Scotland later, freshening from the Southward on our south-west coasts, and becoming Westerly in the south-west of France.

Barometer highest, 30·1 ins. and more over the north-west of Norway and neighbouring parts of the Atlantic, and exceeding 30·0 ins. (except in a few limited areas) over Scandinavia, Denmark, central and southern Europe generally, and the Mediterranean. Lowest, 29·5 ins. and less in a depression over the western parts of our Islands and neighbouring parts of the Atlantic; 29·7 ins. and less in another over the south of Russia; 29·8 ins. and less ina third over the north of Finland; and below 30·0 ins. in a very shallow system over Algeria. Falling rather decidedly in the south-west of England later, rising on our north-west coasts. Depression over Finland moving away to the eastward.

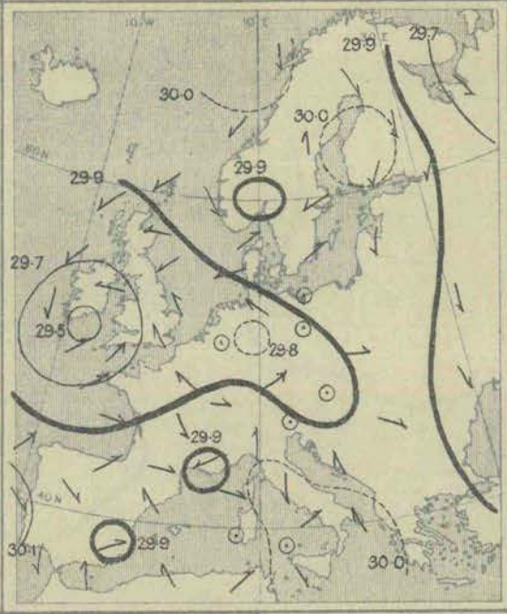
Judd & Co Ltd, Lith. 63, Carter Lane.

Tuesday, 11th July.

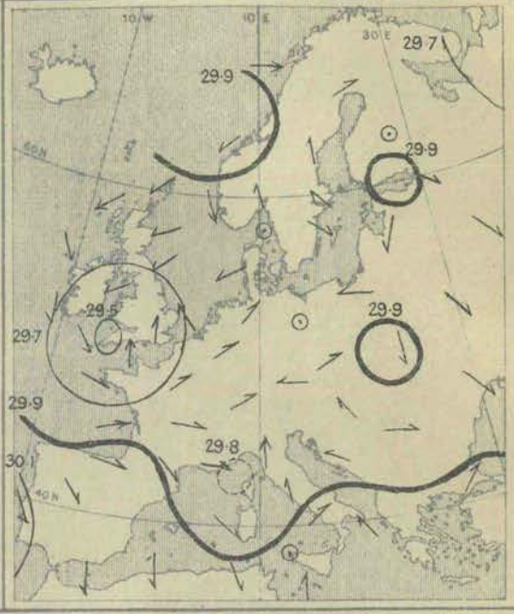
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over south-western, southern, south-eastern, and central Europe, as well as over the Baltic Provinces and Finland, also in several of the eastern parts of England and the west of Scotland; very unsettled and rainy over our western and south-western districts and the western half of the Channel, with a threatening appearance. Rain falling later in nearly all parts of our Islands, France, and Germany, with heavy rain in places; thunderstorms occurring locally.

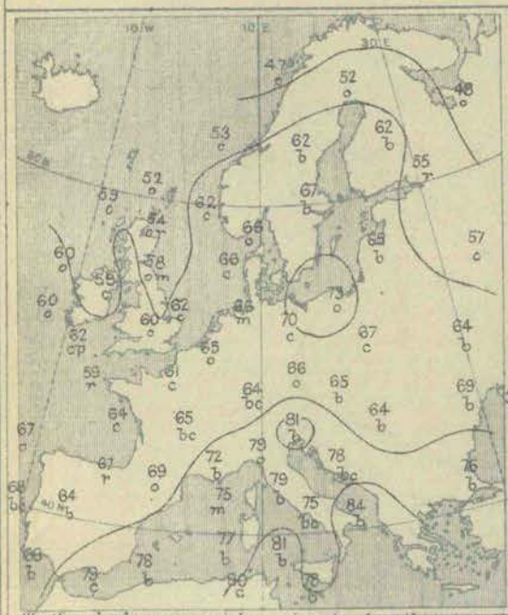
Temperature changing fitfully. Morning readings highest, 86° at Brindisi, and above 80° at Leghorn and several Algerian stations; above 70° at the Mediterranean stations generally; and above 60° except in the far north. Lowest, 43° at Archangel, 53° at Kuopio, 54° at Christiansund, 56° at Shields. Rising later to between 70° and 77° over England. Exceeding 80° in many parts of central and southern Europe, the highest readings of all being 95° at Cagliari and 91° at Brindisi.

Wind extremely light and variable from the Northward over Russia and Finland; very variable over central and southern Europe with the Mediterrancan. Well-marked cyclonic circulation of light to fresh breezes over the British Isles and the west and north-west of France. Above-named circulation moving eastwards very slowly later.

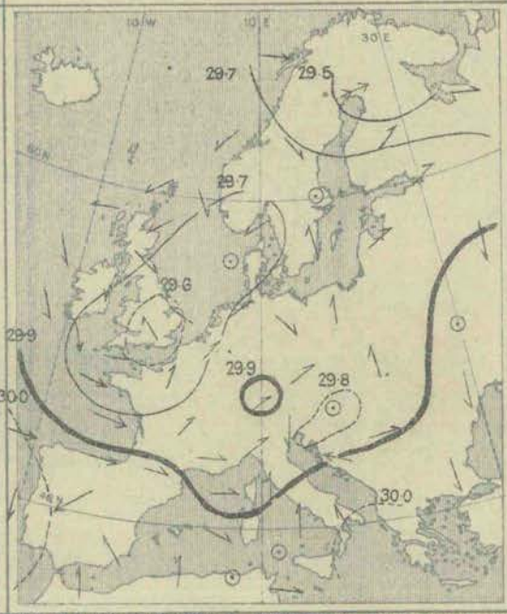
Barometer highest, 30·1 ins. and more to 30·0 ins. over the western half of the Spanish Peninsula, and exceeding 30·0 ins. over Malta, Sicily, and the southern half of Italy, as well as in some parts of Scandinavia, exceeding 29·9 ins. over Germany and Austria-Hungary. Lowest, 29·5 ins. and less in a depression over the south-west of our Islands, having its centre between Cornwall and the south-east of Ireland; 29·7 ins. and less over the north-east of Russia. Depression near Cornwall moving slowly eastwards later.

Wednesday, 12th July.

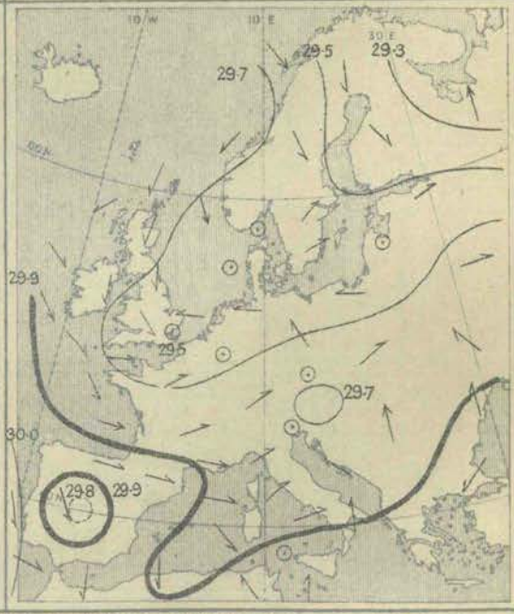
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather cloudy or overcast in most parts of north-western Europe, with rain in the east of Scotland, passing showers at many of the English stations, and thunder at the Helder and Cape Gris Nez. Fine in Sweden and also over the greater part of eastern, central, and southern Europe, but dull in Poland and eastern Germany, and rainy at St. Petersburg and Biarritz. Sky clearing later at several of our western stations, but frequent showers reported in all other parts of the United Kingdom, with thunderstorms in the south of England and some parts of France. Heavy rain falling in Belgium.

Temperature fallen in Great Britain, changed irregularly elsewhere. Morning readings highest, 84° at Brindisi, 83° at Sfax, 81° at Trieste and Palermo, and 80° at La Calle; above 70° over southern Europe generally, as well as at some of the Baltic stations. Lowest, 47° at Bodö, 48° at Archangel, 52° at Haparanda and Sumburgh Head, 53° at Christiansund, and 54° at Aberdeen. Rising during day to 65° or more at most of the English and Irish stations, as well as over central Scotland, and reaching 71° at Parsonstown. Exceeding 75° in many parts of central and southern Europe, the highest readings of all being 102° at Palermo and 95° at Brindisi.

Wind light North-Easterly over the northern parts of Great Britain, moderate Northerly or North-Westerly on our west and south-west coasts, strong Westerly over the Bay of Biscay, light South-Westerly over central France, Germany, and the Netherlands, variable in the south-east of England. Strong from the Westward over the northern parts of Finland and Scandinavia, with a gale at Ulcaborg; Northerly over central and southern Russia. Variable over Austria and Italy. Easterly (South-Easterly to North-Easterly) in Spain, Southerly or South-Easterly in Algeria. No important change occurring during day.

Barometer highest, 30·0 ins. and upwards over the western parts of the Iberian Peninsula, and also over Tunis and the extreme south of Italy. Lowest, 29·5 ins. and less in a depression lying over Lapland, 29·6 ins. and less in another system lying over the Channel and the south-eastern parts of England. Former disturbance subsequently travelling eastwards; latter system moving north-eastwards; new depression forming over central Spain.

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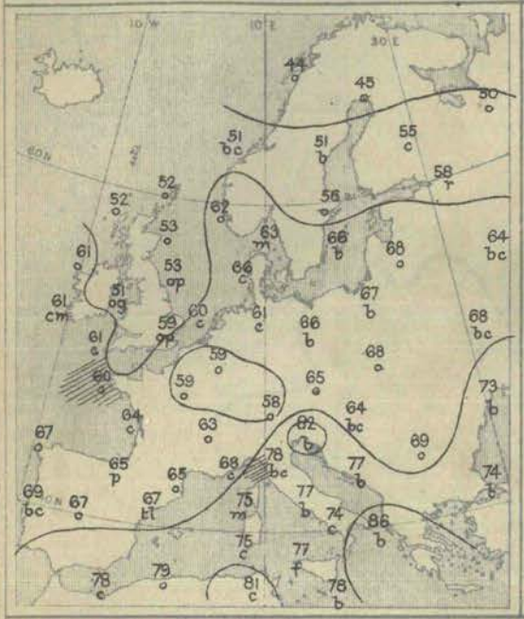
Thursday, 13th July.

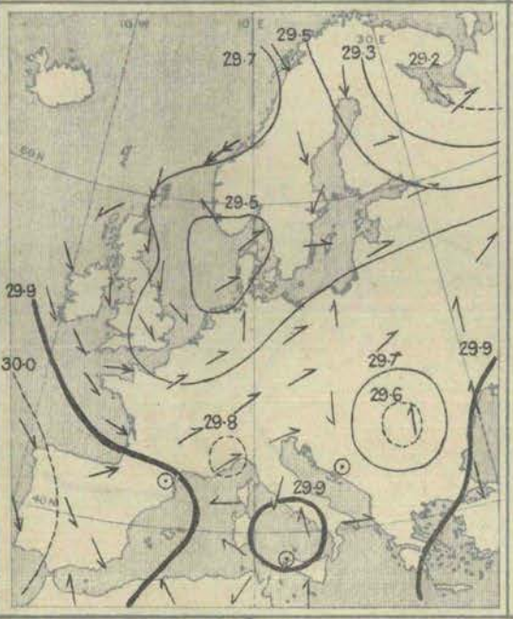
Temperature and Weather.

8 a.m.

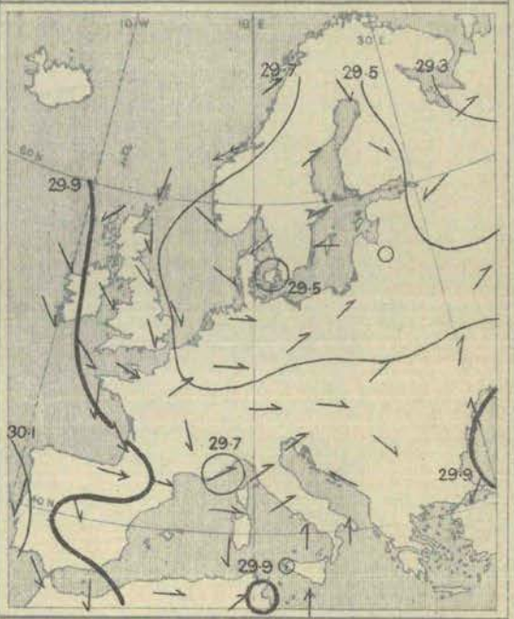


Barometer and Wind.

8 a.m.



6 p.m.



Weather cloudy or overcast in most parts of western Europe, with rain at several of the English stations, as well as at Faerder and Biarritz. Fine in many parts of Scandinavia, Russia, Germany, Austria, and Italy, but rainy over the Gulf of Finland. Thunderstorm reported at Barcelona. Sky clearing later in Ireland, but weather remaining cloudy in most parts of Great Britain and France, with heavy showers in places, and with local thunderstorms in the south of England, as well as in many parts of France and Germany.

Temperature fallen in nearly all countries. Morning readings highest, 86° at Brindisi, 82° at Trieste, 81° at La Calle and Tunis, and 79° at Algiers, above 70° in most parts of southern and eastern Europe, and above 65° at several of the central stations. Lowest, 44° at Bodö, 45° at Haparanda, 48° at Ulealborg, 50° at Archangel, and 51° at Hernösand and Christiansund; below 55° over the northern parts of Great Britain. Rising during day to between 65° and 70° over the southern parts of our Islands, but remaining below 60° at several of our northern stations. Exceeding 80° in some parts of France and Germany, as well as over a considerable portion of southern Europe, the highest reading of all being 91° at Brindisi.

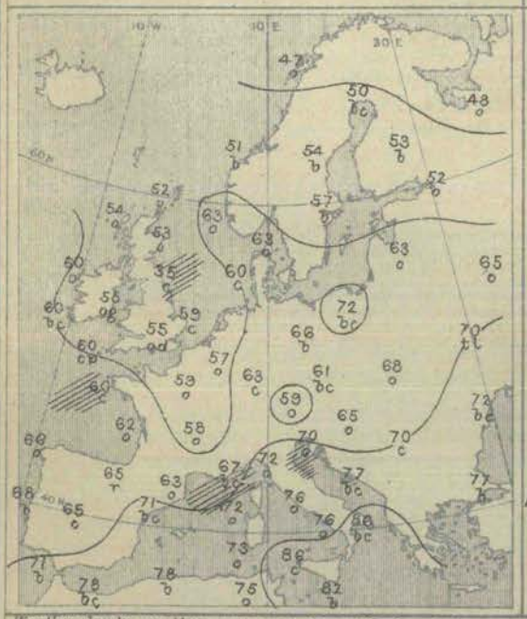
Wind light to moderate from the Northward or North-Westward in our Islands, fresh from West or North-West over Spain and the Bay of Biscay; South-Westerly over central France, Germany, Denmark, and the Netherlands. North-Easterly over the more southern parts of Scandinavia, with a gale at Christiansund. Strong from the Northward in the north of Sweden, light from West or South-West over the northern parts of Russia; Southerly over the south of Russia, and also in the north of Italy; variable in the south of Italy. No important change occurring during day.

Barometer highest, 30·0 ins. and upwards in an anticyclone extending from the Atlantic over the western parts of the Spanish Peninsula, 29·9 ins. and upwards over the Black Sea and the south of Russia. Lowest, 29·2 ins. and less in a depression over the White Sea, 29·5 ins. and less in two other systems, one lying over the eastern parts of the North Sea, and the other over the northern parts of the Baltic, 29·6 ins. and less in a fourth system over Galicia. Depressions over North Sea and Baltic subsequently moving eastwards and partially filling up. Disturbance over Galicia entirely disappearing.

Friday, 14th July.

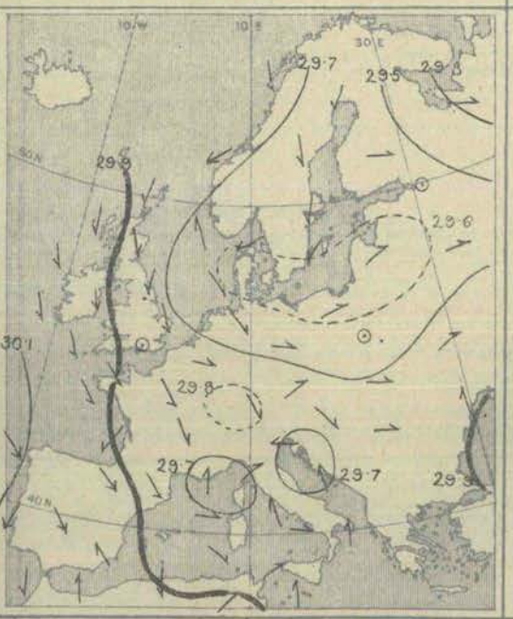
Temperature and Weather.

8 a.m.

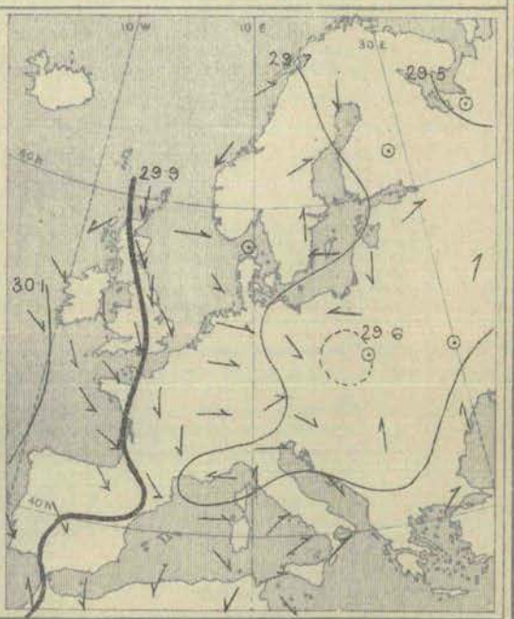


Barometer and Wind.

8 a.m.



6 p.m.



Weather cloudy over the greater part of our Islands and the Continent, with rain in the south-east of England, as well as at Limoges and Biarritz, and with thunder and lightning at Kiev. Fine in Sweden and Finland, and also in Algeria and the southern parts of Spain, Italy, and Russia. Slight showers falling during day in isolated parts of the United Kingdom, and heavier falls at many of the French stations, with thunderstorms in places. Considerable quantities of rain experienced in Austria and Italy.

Temperature fallen a little generally. Morning readings highest, 86° at Brindisi and Palermo, 82° at Malta, and 78° at Nemours and Algiers: above 70° at most of the Mediterranean and Adriatic stations, as well as in the south of Russia; above 65° over the greater part of Spain and central Europe. Lowest, 47° at Bodö, 48° at Archangel, 50° at Haparanda, and 51° at Ulealborg and Christiansund; below 55° in the northern parts of the United Kingdom and also in some parts of central England. Daily maxima below 60° at several of our northern stations, and very little above 65° even in the extreme south of our Islands. Thermometer exceeding 80° in many parts of southern Europe, and exceeding 90° in the south of Italy, the highest reading of all being 97° at Palermo.

Wind light to fresh from the Northward over our Islands, France, and Spain, Northerly or North-Easterly in Scandinavia; North-Westerly in Denmark; Westerly in Germany, South-Westerly over the Baltic Provinces and the south of Russia. Southerly or South-Easterly at the Adriatic stations, with a moderate gale at Lésina; variable in Algeria. No important change occurring during day.

Barometer highest, 30·1 ins. and upwards in a large anticyclone lying to the south-westward of our Islands and the westward of the Spanish Peninsula. Lowest, 29·3 ins. and less in a depression over northern Russia; 29·6 ins. and less in a shallow area lying over Denmark, the Baltic, and the neighbouring parts of Russia and Germany, 29·7 ins. in two other systems lying respectively over the Gulf of Genoa and the northern parts of the Adriatic. Depressions all filling up gradually in course of day, and anticyclone in extreme west extending slightly north-eastwards.

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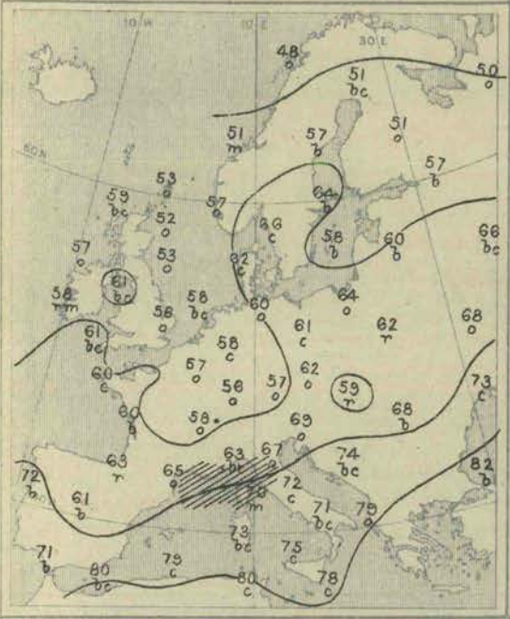
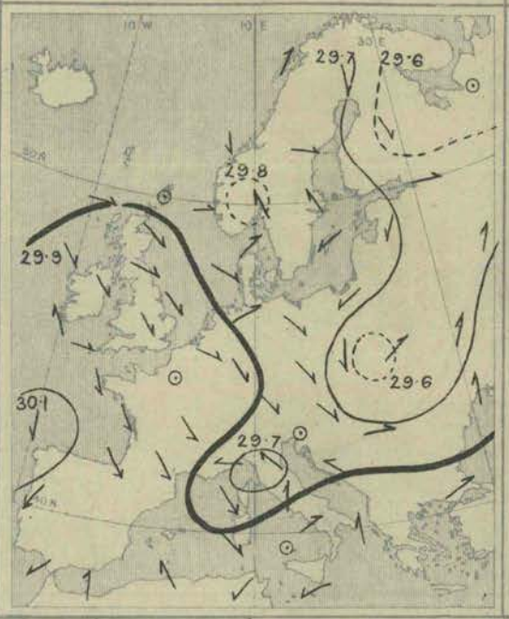
Saturday, 15th July.

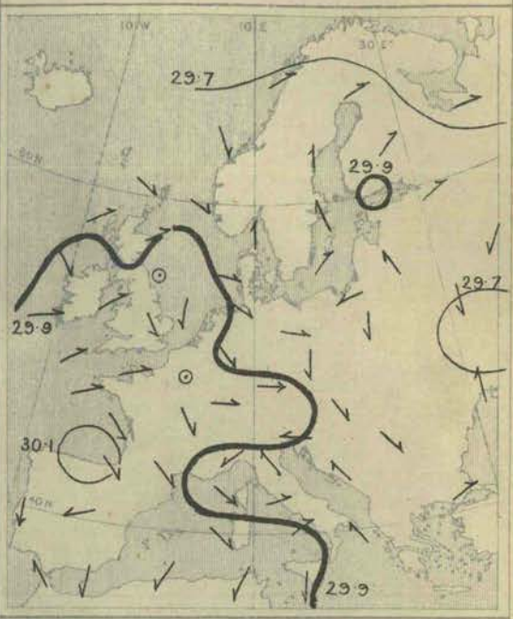
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fair over the greater part of our Islands, but dull in places, with rain at Valencia (Ireland). Fine over Sweden and the Gulf of Finland, as well as over the greater part of southern Europe, but dull in most of the central countries, and rainy in Poland and Austria. Rain falling later in all but the more eastern parts of the United Kingdom, as well as at many of the French stations, with a thunderstorm at Nice. Large quantities of rain experienced in Poland—as much as 1·8 ins. at Cracow.

Temperature changed very little in our Islands, but fallen at most of the Continental stations. Morning readings highest, 82° at Constantinople, 80° at Nemours and La Calle, and 79° at Brindisi and Algiers; above 70° in most parts of southern and eastern Europe. Lowest, 48° at Bodö, 56° at Archangel, 51° at Haparanda, Kuopio, and Christiansund, and 52° at Aberdeen; below 55° at several of our own northern stations. Daily maxima very little above 65° in any part of the United Kingdom, but thermometer exceeding 70° in France and exceeding 80° in many parts of Spain and Italy, the highest reading of all being 93° at Brindisi

Wind light from the North-Westward over the greater part of our Islands, France, and Germany; moderate to fresh from the North-Eastward or Eastward in Spain. Variable in Scandinavia; North-Westerly in Finland; North-Easterly in the Baltic Provinces; Southerly over the central and southern parts of Russia, and also in Italy. Subsequently backing to the South-Westward in many parts of the United Kingdom and also in Finland; no important change occurring elsewhere.

Barometer highest, 30·1 ins. and upwards in an anticyclone lying over the north-west of Spain and the adjacent parts of the Atlantic. Lowest, 29·6 ins. and less in a large shallow area over northern Russia and also in a well-defined depression over Poland; 29·7 ins. and less in another disturbance lying over the Gulf of Genoa. Depression over northern Russia and Poland subsequently moving eastwards, but shallow disturbances apparently advancing towards our Islands from the Atlantic; barometer falling slowly in most parts of the United Kingdom.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are show by arrows, which are drawn flying *with the wind*, the force is indicated thus: ⤇ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breese: and ⊙ = a calm. In the left-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds: o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Germany, Sweden, and Norway, and 7 a.m. in France, Algeria, Italy, Austria, and Russia; that for 6 p.m. is prepared from observations made at 6 p.m. in the British Islands and France, 7 p.m. in Algeria, 8 p.m. in Sweden and Norway, Germany, and Austria, and 9 p.m. in Russia, Belgium, and Italy. The time indicated in each case is the standard time for each country.

GENERAL NOTES.

The general distribution of pressure noticed over Europe last week was very irregular, and unsettled weather was therefore prevalent in all but the extreme southern countries, where the conditions were mostly fine. At the commencement of the week a well-marked depression advanced over our Islands from the south-westward, but on reaching the south of Scotland the system changed its course, and travelled away in a north-westerly direction to the Atlantic. On the 11th, however, a new disturbance appeared over our south-western coasts, the centre subsequently passing eastwards over the south of England, and north-eastwards across the North Sea to the Baltic, where the system gradually dispersed. During the progress of the two depressions other low pressure areas were developed over various parts of northern, eastern, and central Europe, and the weather was therefore generally unsettled, with heavy falls of rain in many places, and with local thunderstorms of considerable severity. As the second depression passed away an anticyclone spread over our Islands from the Atlantic, and Northerly winds set in over the greater part of western Europe, with cool but improving weather. At the close of the week, however, further low pressure systems were beginning to advance from the Atlantic, and the winds were therefore backing to the Westward and South-Westward, with heavy rain in the southern parts of the United Kingdom.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 164.

Stations.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	Stations	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	8·7	?	7	?	EASTBOURNE	38·4	?	34	?
OSWALDKIRK (Yorkshire)	23·6	?	21	?	TENBY	47·6*	?	42*	?
WORKSOP	14·6	−21·1	13	+19	NEWQUAY	52·0	?	47	?
THURCASTON (Leicestershire)	19·4	−17·4	17	−16	TORQUAY	34·8*	?	31*	?
MARGATE	35·7	?	32	?	ARLEY COTTAGE (County Cavan)	24·5	?	21	?
WESTBOURNE (Sussex)	33·1 *	?	30*	?	GUERNSEY	51·9*	?	47*	?
BRIGHTON	38·0	?	34	?					

* The values at Westbourne, Tenby, Torquay and Guernsey are obtained by Jordan's Photographic Recorder.

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WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W. R. H. SCOTT, F.R.S., SECRETARY.

By whom Subscriptions, payable in advance, can be received.

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VOL. X. No. 29.] *Third Series.* WEEK ENDING SATURDAY, 22ND JULY, 1893. [*Price 6d.* [*Annual Subscription, post paid*, £1 10*s.* 0*d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871-90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the twenty-five years 1866-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the ten years 1881-90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

DISTRICTS. (See p. 164.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 1st, 1893. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
	°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts. 0. SCOTLAND, NORTH	66	40	60·5	49·5	54·6	0 (average)	88	+ 8	0	0	1320	+432	485	- 57
1. SCOTLAND, EAST	71	39	64·7	48·7	56·2	1 below.	99	- 3	0	0	1454	+268	548	- 21
2. ENGLAND, N.E.	71	47	65·7	51·9	58·3	1 below.	114	0	0	0	1516	+287	436	- 62
3. ENGLAND, EAST	73	49	68·6	53·9	60·7	0 (average)	131	+ 4	0	0	1836	+372	524	- 37
4. MIDLAND COUNTIES	74	45	67·5	52·2	59·4	1 below.	122	0	0	0	1964	+494	505	- 47
5. ENGLAND, SOUTH	74	48	67·6	55·4	61·0	1 below.	133	+ 2	0	0	2008	+424	373	- 43
Principal Grazing, &c., Districts. 6. SCOTLAND, WEST	69	40	62·7	50·4	56·1	1 below.	99	- 4	0	0	1617	+400	354	- 63
7. ENGLAND, N.W.	76	48	64·7	54·4	59·2	0 (average)	120	+ 7	0	0	1815	+512	323	- 91
8. ENGLAND, S.W.	72	42	66·3	54·6	60·1	0 (average)	127	+ 9	0	0	2029	+553	246	- 70
9. IRELAND, NORTH	70	42	64·3	51·1	57·2	0 (average)	106	+ 2	0	0	1758	+431	258	-104
10. IRELAND, SOUTH	72	41	66·1	52·7	59·0	0 (average)	119	+ 5	0	0	1991	+469	178	-100
—CHANNEL ISLANDS	71	56	66·5	58·2	32·1	1 above.	141	+13	0	0	2255	+630	70	- 52

Rainfall.

DISTRICTS. (See p. 164.)	For the Week. Number of Rainy Days.	Total Fall.	More or less than the mean for the Week.	From Jan. 1st, 1893. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.
		10ths of in.	10ths of ins.			Ins.	Ins.
Principal Wheat-producing Districts. 0. SCOTLAND, NORTH	7	18	10 more.	119	-13	21·0	- 3·6
1. SCOTLAND, EAST	5	9	2 more.	98	- 9	13·0	- 2·8
2. ENGLAND, N.E.	5	6	1 less.	85	-14	10·8	- 2·2
3. ENGLAND, EAST	5	9	2 more.	83	-14	9·7	- 3·3
4. MIDLAND COUNTIES	4	6	1 less.	83	-13	10·4	- 4·2
5. ENGLAND, SOUTH	4	7	2 more.	79	-14	10·5	- 3·3
Principal Grazing, &c., Districts. 6. SCOTLAND, WEST	5	15	6 more.	98	-12	18·2	- 7·1
7. ENGLAND, N.W.	5	7	1 less.	87	-17	13·2	- 3·3
8. ENGLAND, S.W.	5	12	5 more.	82	-25	15·7	- 4·2
9. IRELAND, NORTH	6	14	6 more.	104	-18	15·6	- 2·6
10. IRELAND, SOUTH	5	4	3 less.	93	-20	15·5	- 4·7
—CHANNEL ISLANDS	6	9	3 more.	87	-27	12·2	- 4·0

Bright Sunshine.

DISTRICTS. (See p. 164.)	For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 1st, 1893. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
Principal Wheat-producing Districts. 0. SCOTLAND, NORTH	18	- 5	15	- 5	681	- 77	25	- 3
1. SCOTLAND, EAST	45	+ 17	39	+12	855	- 9	32	0
2. ENGLAND, N.E.	46	+ 11	41	+10	959	+175	33	+ 6
3. ENGLAND, EAST	32	- 13	29	-12	1152	+209	44	+ 8
4. MIDLAND COUNTIES	41	+ 1	37	+ 2	1078	+246	41	+ 9
5. ENGLAND, SOUTH	34	- 10	30	-10	1184	+291	45	+ 11
Principal Grazing, &c., Districts. 6. SCOTLAND, WEST	48	+ 10	42	+10	978	+127	37	+ 5
7. ENGLAND, N.W.	48	+ 14	43	+11	983	+142	37	+ 5
8. ENGLAND, S.W.	38	- 6	35	- 6	1262	+281	48	+ 10
9. IRELAND, NORTH	53	+ 22	47	+20	831	+ 36	31	+ 1
10. IRELAND, SOUTH	39	+ 4	34	+ 3	926	+ 19	35	+ 1
—CHANNEL ISLANDS	44	- 12	41	-12	1448	+317	55	+ 12

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather was again very unsettled, with heavy falls of rain in many parts of the Kingdom. Thunderstorms occurred at several of our northern stations on the 16th or 17th.

Temperature was slightly below the mean in most of the "Wheat Producing" districts, as well as in Scotland W., but in other localities it agreed almost precisely with the normal. The highest readings, which occurred at various times in the different districts, but mostly about the middle of the week, were, as a rule, a little above 70°. In the west and north of Scotland, however, the thermometer did not reach that point, while in England N.W. (at Stonyhurst) it rose to 76°. The lowest readings, which were also observed on varying dates, ranged from 39° or 40° in the Scotch districts to 49° in England E., and to 56° in the Channel Isles. On the night of the 19th the thermometer in many parts of England did not fall below 60°.

Rainfall varied considerably, not only in different parts of the Kingdom, but also in neighbouring portions of each district. In England N.E., the Midland Counties, England N.W., and Ireland S. there was a deficit—mostly very slight—but in other districts the amount was more than the mean, the excess being large at many of our western and extreme northern stations.

Bright Sunshine was also very irregularly distributed. In the eastern and southern parts of England, as well as in Scotland N., there was a deficiency, but in other districts the amount was in excess of the mean. The percentage of the possible duration ranged from 15 in Scotland N., 29 in England E., and 30 in England S., to 47 in Ireland N.

Barometer and Wind.—During the week two or three large depressions appeared off our extreme north-western and northern coasts, while small secondary systems advanced eastwards across our more southern districts, the prevailing winds being South-Westerly or Westerly. The disturbance which spread over our northern districts on the 19th produced very strong winds on all our western and southern coasts, with slight gales in places, and heavy rain at many of our north-western stations. The most important of the secondary depressions passed across the south of England on the 16th, and, although the system was far too shallow to occasion any increase of wind, its movements were accompanied by heavy falls of rain on our extreme southern coasts.

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II.—DATA from which the SUMMARY on page 169 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°				Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	62	46	58·7	49·3	53·4	+ 0·7	80	0	6	1·07	+0·55	*	*	*	*
	Stornoway	62	47	59·9	49·0	54·1	+ 0·4	85	0	7	1·82	+1·15	26·6	- 5·1	22	- 5
	Wick	65	48	61·7	51·7	56·4	+ 1·2	101	0	7	1·89	+1·36	*	*	*	*
	Lairg §	66	40	61·4	48·4	54·5	- 0·9	88	0	7	2·42	+1·73	*	*	*	*
	Glencarron §	62	45	59·0	47·7	53·0	- 1·5	77	0	7	2·33	+0·93	*	*	*	*
	Fort Augustus §	66	46	63·5	49·5	56·0	- 0·7	98	0	6	1·26	+0·54	12·1	?	10	?
	Fort William §	61	49	59·3	51·1	54·9	- 1·9	90	0	6	2·02	+0·78	15·0	?	13	?
1. SCOTLAND, E.	Nairn	70	44	65·1	48·0	56·0	- 1·4	98	0	5	1·21	+0·31	*	*	*	*
	Aberdeen	71	49	65·0	50·9	57·5	+ 0·4	109	0	5	0·76	+0·09	52·9	+14·9	45	+12
	Braemar §	65	45	59·8	47·0	53·0	- 1·7	77	0	7	1·42	+0·74	24·8†	?†	21†	?†
	Ochtertyre §	71	39	66·0	47·1	55·9	- 1·3	97	0	4	1·22	+0·44	*	*	*	*
	Leith	71	47	67·1	50·6	58·3	- 0·3	114	0	3	0·47	-0·17	*	*	*	*
	Marchmont §	69	45	64·9	48·6	56·2	- 0·8	99	0	5	0·42	-0·38	55·3	?	48	?
2. ENGLAND, N.E.	Alnwick Castle	68	47	64·3	51·1	57·2	- 0·2	106	0	5	0·65	-0·03	*	*	*	*
	Durham	71	47	68·4	50·2	58·7	- 0·6	117	0	6	0·66	-0·02	48·1	+11·1	42	+10
	Shields	70	49	65·4	51·4	57·9	- 0·3	111	0	4	0·59	-0·05	*	*	*	*
	Scarborough ℳ	70	49	65·4	52·3	58·4	- 1·1	115	0	6	0·66	-0·01	*	*	*	*
	York	71	49	66·3	52·1	58·7	- 1·1	117	0	4	0·49	-0·13				
	Spurn Head	69	52	64·6	54·4	59·1	- 1·0	120	0	5	0·27	-0·13	*	*	*	*
3. ENGLAND, E.	Hillington ℳ	72	50	69·0	52·6	60·2	- 0·5	127	0	5	0·85	+0·15	35·1	- 8·7	31	- 8
	Yarmouth	71	50	66·6	54·7	60·2	- 0·5	127	0	6	0·47	-0·21	*	*	*	*
	Geldeston	72	49	68·5	53·9	60·7	- 0·1	131	0	5	0·61	+0·01	29·0	-17·7	26	-16
	Cambridge	73	51	70·9	53·9	61·8	+ 0·2	139	0	5	1·75	+1·21	29·9	-14·2	27	-13
	Rothamsted	71	49	68·2	54·3	60·8	+ 0·4	132	0	5	0·65	+0·02	34·2	?	31	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	74	45	69·0	49·3	58·5	- 1·9	116	0	4	0·30	-0·32	*	*	*	*
	Loughborough	73	50	66·7	53·0	59·4	- 2·1	122	0	4	0·47	-0·06	*	*	*	*
	Stamford (Ketton Hall)	72	48	69·6	52·3	60·4	- 1·0	129	0	6	0·56	-0·04	*	*	*	*
	Cheadle ℳ	70	47	64·2	52·0	57·7	- 0·4	110	0	4	0·35	-0·35	*	*	*	*
	Churchstoke ℳ	70	46	65·7	51·2	58·0	- 0·1	112	0	4	0·30	-0·31	47·6	+ 7·9	43	+ 8
	Hereford ℳ	72	48	69·1	53·5	60·8	+ 0·4	132	0	3	0·26	-0·30	*	*	*	*
	Cirencester	69	46	67·3	52·0	59·1	- 0·3	120	0	4	0·77	+0·06	33·1	- 8·3	30	- 7
	Oxford	72	49	68·6	54·4	61·0	0·0	133	0	5	1·42	+0·82	35·5	- 7·4	32	- 6
5. ENGLAND, S.	London	74	51	70·1	55·4	62·2	- 0·5	141	0	5	0·40	-0·13	30·2†	- 9·6†	27†	- 9†
	North Foreland	70	53	67·1	55·4	60·8	- 0·3	132	0	4	0·64	?	*	*	*	*
	Strathfield Turgiss ℳ	72	50	69·5	53·6	61·0	- 0·2	133	0	4	0·25	-0·28	*	*	*	*
	Dungeness	71	51	67·0	56·9	61·6	- 0·1	137	0	3	1·25	+0·79	*	*	*	*
	Hastings (St. Leonards)	69	48	65·2	54·8	59·6	- 2·1	123	0	4	1·75	+1·24	34·3	-15·9	31	-15
	Southampton	73	50	63·3	55·6	61·5	- 0·5	137	0	4	0·62	00·0	35·8	-11·0	33	-10
	Hurst Castle	71	55	67·4	56·9	61·8	+ 0·1	139	0	5	0·48	-0·02	*	*	*	*
	Stowell ℳ	67	51	65·8	54·2	59·6	- 0·6	123	0	6	0·54	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	64	47	61·3	49·9	55·2	- 1·9	92	0	6	2·47	+1·22	*	*	*	*
	Glasgow	66	48	63·0	50·9	56·5	- 0·8	102	0	4	1·28	+0·46	40·4	+11·1	35	+9
	Ardrossan	64	51	61·4	52·3	56·5	- 1·6	102	0	3	0·79	+0·11	*	*	*	*
	Glenlee §	69	40	64·8	47·2	55·4	- 1·5	94	0	6	1·65	+0·65	*	*	*	*
	Douglas (Isle of Man)	66	47	63·2	51·6	57·0	- 0·4	105	0	5	1·40	+0·68	55·3	+11·8	49	+11
7. ENGLAND, N.W.	Stonyhurst	76	50	63·9	53·3	58·2	- 0·5	113	0	6	1·50	+0·45	54·7	+17·7	48	+15
	Blackpool ℳ	66	55	64·3	56·5	60·1	+ 0·4	127	0	4	0·72	-0·05	52·5	+12·5	46	+11
	Manchester	68	48	65·6	52·6	58·7	+ 0·2	117	0	4	0·59	-0·30	39·1†	?	35†	?
	Liverpool Obsy. (Bidston)	67	54	64·7	54·7	59·4	- 0·5	122	0	4	0·22	-0·47	*	*	*	*
	Llandudno ℳ	67	54	65·1	55·1	59·8	- 0·3	125	0	4	0·29	-0·32	45·4	+ 8·5	41	+ 8
	Holyhead	66	53	64·6	54·0	58·9	- 0·3	118	0	5	0·57	0·00	*	*	*	*
8. ENGLAND, S.W.	Llandovery	72	42	69·3	51·3	59·7	+ 0·3	124	0	4	1·00	+0·06	*	*	*	*
	Pembroke	65	54	63·1	56·0	59·3	+ 0·8	121	0	4	0·54	-0·05	44·3	- 0·7	40	- 1
	Bristol (Montpelier)	71	51	69·3	55·6	62·0	+ 1·4	140	0	5	1·59	?				
	Arlington (N. Devon)	66	48	64·6	52·4	58·1	- 0·4	113	0	6	2·40	+1·30	*	*	*	*
	Cullompton ℳ	69	49	67·8	54·9	60·9	+ 1·2	132	0	6	1·08	+0·40	31·3	- 8·2	28	- 7
	Falmouth	68	55	65·9	56·7	61·0	+ 1·0	133	0	6	1·32	+0·54	41·4	- 5·3	38	- 5
	Plymouth	68	51	66·0	55·7	60·5	- 0·9	130	0	6	1·17	+0·51	33·0	-10·0	30	-10
	Prawle Point	70	49	64·7	54·3	59·1	- 0·2	120	0	6	0·54	+0·01	*	*	*	*
9. IRELAND, N.	Malin Head	64	51	61·0	52·3	56·4	- 1·1	101	0	6	1·40	?	*	*	*	*
	Londonderry	69	48	65·3	51·1	57·7	- 0·6	110	0	5	1·51	+0·69	*	*	*	*
	Edenfel (Omagh)	66	43	63·4	49·0	55·7	- 1·8	96	0	6	1·74	+0·95	*	*	*	*
	Belmullet	68	48	63·0	53·4	57·9	+ 0·1	111	0	6	1·27	?	*	*	*	*
	Markree Castle	66	42	64·1	49·4	56·2	- 0·5	99	0	7	1·03	+0·31	50·4	+21·9	45	+19
	Brookeborough	67	45	64·7	49·4	56·5	- 0·7	102	0	5	2·02	+1·17	*	*	*	*
	Armagh	68	46	65·5	49·9	57·2	- 0·6	106	0	5	1·16	+0·43	53·2	+23·0	47	+21
	Donaghadee	70	54	65·4	56·7	60·8	+ 3·5	132	0	7	1·45	+0·76	*	*	*	*
	Edgeworthstown	70	43	66·3	48·4	56·7	- 0·9	103	0	6	0·76	-0·09	*	*	*	*
10. IRELAND, S.	Dub'in	69	50	67·3	53·4	59·9	0·0	125	0	5	0·35	-0·21	? 49·3	+?13·6	?44	+?11
	Parsonstown	69	41	66·0	49·7	57·3	- 1·3	107	0	6	0·44	-0·25	37·2	+ 4·5	33	+ 5
	Kilkenny	68	44	67·0	50·4	58·1	- 0·4	113	0	4	0·36	-0·23	*	*	*	*
	Waterford	72	48	68·5	51·9	59·6	+ 0·1	123	0	4	0·39	-0·29	*	*	*	*
	Roche's Point	68	51	66·3	54·7	60·1	+ 0·2	127	0	5	0·37	-0·38	*	*	*	*
	Valencia	65	44	63·6	53·9	58·4	- 0·3	115	0	6	0·83	-0·07	29·1	- 5·9	26	- 6
	Killarney	67	42	65·4	52·6	58·6	+ 0·2	116	0	4	0·19	?	*	*	*	*
	Foynes	66	47	64·9	55·0	59·6	+ 1·1	123	0	6	0·53	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	67	56	65·0	57·9	61·2	+ 1·0	134	0	6	1·36	+0·77	*	*	*	*
	Jersey	71	56	68·0	58·4	62·9	+ 0·5	146	0	5	0·36	-0·17	40·2	-12·1	37	-12

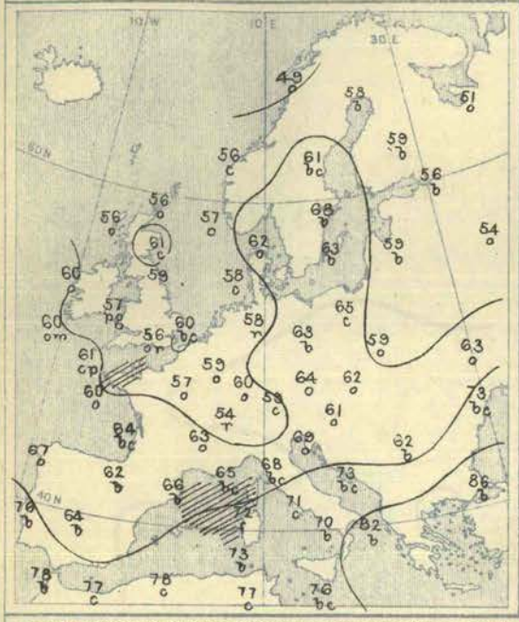
Stations marked ℳ are in connection with the Royal Meteorological Society, and those marked § with the Scottish Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

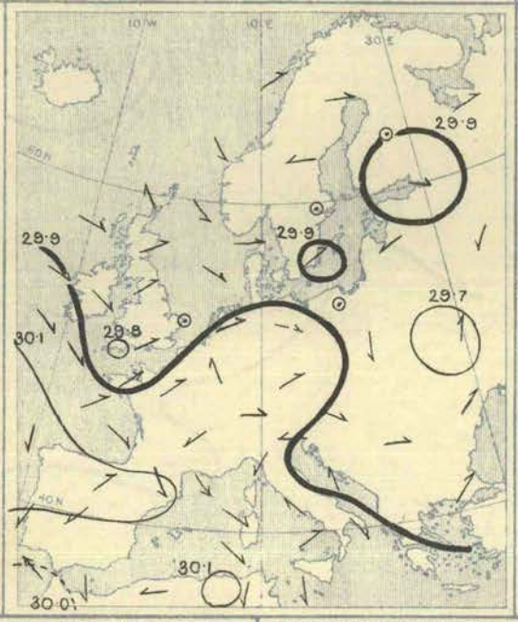
† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row) at the Kew Observatory, and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

Sunday, 16th July.

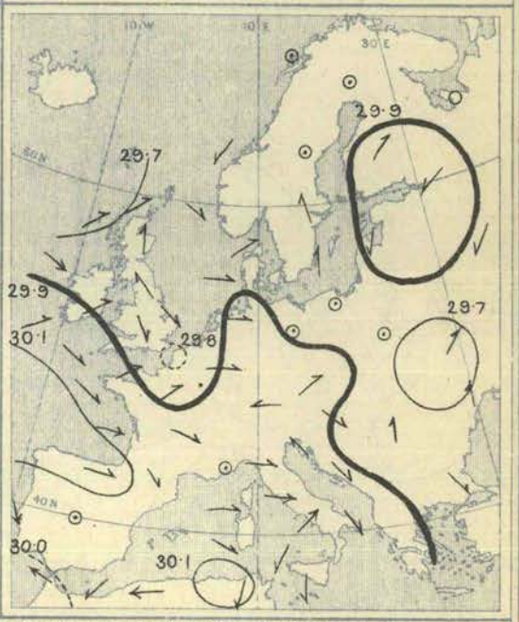
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fine on several parts of our northern and eastern coasts, but cloudy in all other parts of the United Kingdom, with rain at many of the English stations, especially heavy over the extreme southern counties—notably at Eastbourne; fine and bright over Sweden, Russia, and the greater part of southern Europe, cloudy or overcast in most of the central countries. Rain falling during day in nearly all parts of our Islands, as well as at many of the French and German stations, amounts exceeding an inch at Dungeness and Cape Gris Nez, and other parts of the north-east of France. Great improvement taking place over England in evening.

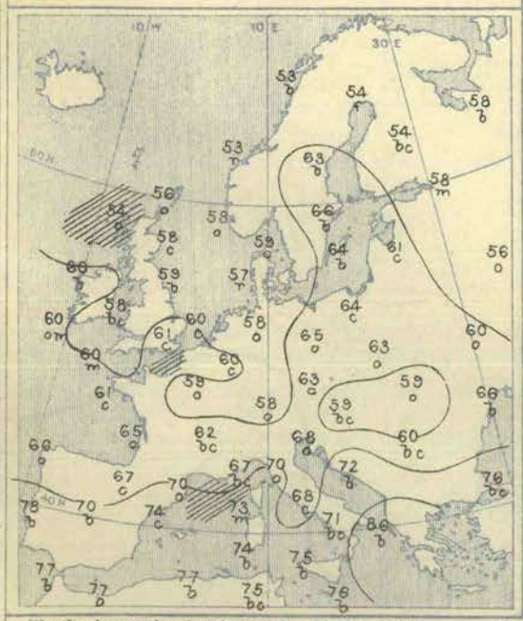
Temperature risen in most parts of the United Kingdom, as well as in Finland, Scandinavia, and Spain, changed irregularly elsewhere. Morning readings highest, 86° at Constantinople, 82° at Brindisi, and above 70° at several of the Mediterranean and Adriatic stations, and also on the coast of Spain. Lowest, (1) 49° at Bodö, 51° at Archangel, 54° at Moscow, and 56° at St. Petersburg; (2) 55° at Ardrossan and Oxford. Rising during day to 65° or a little above it in most parts of the United Kingdom. Exceeding 75° over the southern parts of France, and rising to 86° in the south of Italy, 88° at Lisbon, 90° at Madrid, and 95° at Aumale.

Wind light from between West and South in Scotland, and from North-West or North on our western coasts; variable over the eastern and central parts of England, South-Westerly or Westerly over the Channel and Bay of Biscay. Variable over Scandinavia and the northern and central parts of Russia. South-Westerly in the south of Russia, Westerly in Germany and Austria, variable in Italy, Easterly or North-Easterly in Spain. Subsequently backing to the Westward in Ireland, no important change occurring elsewhere.

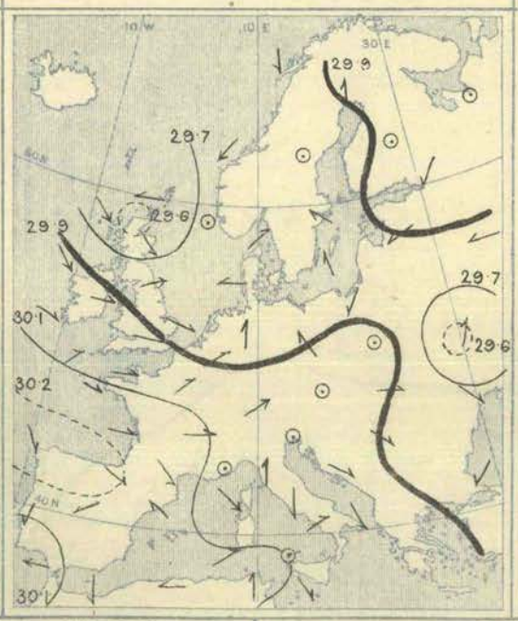
Barometer highest, 30·1 ins. and upwards in an anticyclone extending from the Atlantic across the northern parts of the Spanish Peninsula. Lowest, 29·7 ins. and less in a small depression lying near Kiev; 29·8 ins. and less in a large one lying over northern Russia, Scandinavia, and the extreme north of our Islands, and also in a very small one over Dorsetshire. Last-named disturbance subsequently moving eastwards rapidly to Belgium, but large system beginning to approach our extreme northern coasts from the westward.

Monday, 17th July.

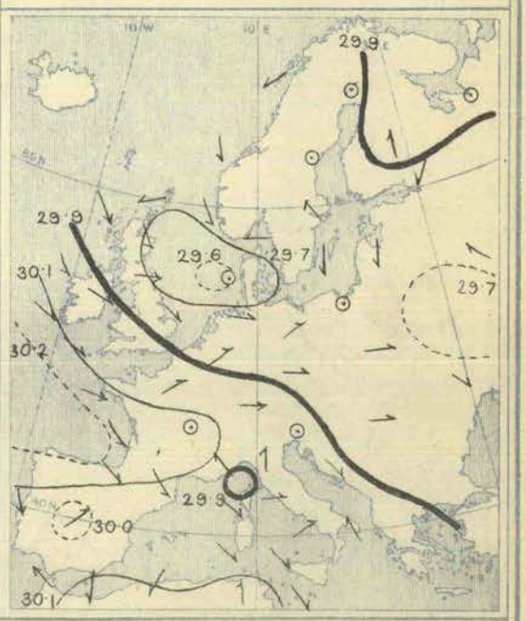
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over the southern parts of France and the Mediterranean; also at many stations in Lapland, Finland, and Sweden, and the north-east of England; very variable elsewhere—cloudy or overcast in most places, with fog at Haparanda, rain at Christiansund and Fanö, and showers in several parts of Ireland and England. Some showers later in many parts of our Islands and France, and considerable falls of rain over Denmark and Germany; thunder and lightning in the north-east, east, and south-east of England, the Netherlands, and north Germany.

Temperature fallen decidedly in Scotland, not changed much elsewhere. Morning readings highest, 86° at Brindisi, 81° at Sfax, and above 70° at many stations in south-western, southern, and south-eastern Europe; 60° to 66° over central Europe and on the Swedish coasts. Lowest, 53° at Bodö and Nairn, 54° at Stornoway, Kuopio, and Haparanda, and below 60° over the greater parts of our Islands. Rising later to between 65° and 70° at many of our own stations, to between 70° and 73° over Germany, to 77° at Nice, 81° in the south-west of France, 90° and more in the south of Italy, 93° at Lisbon, and 95° at Aumale. Night cool over England.

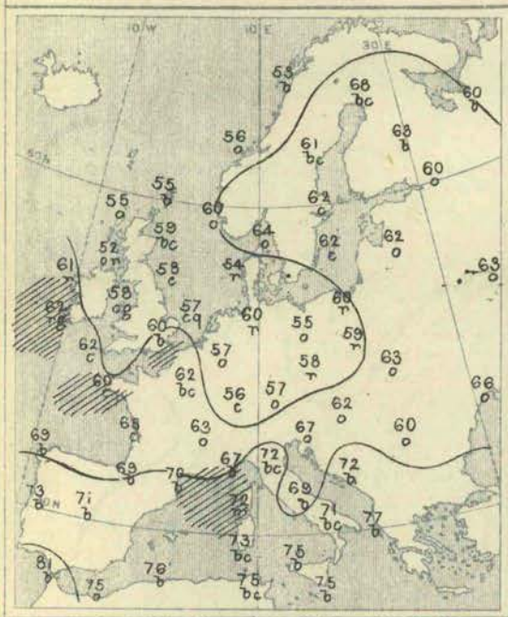
Wind (1) light and variable from between East and South over Finland and the Gulfs of Finland and Bothnia, and from between West and South over the greater part of south-western and southern Europe; (2) moderate to fresh from North-West on our western and northern coasts, Westerly over England, North-Easterly in the west of Norway. Weaker cyclonic circulations over the Mediterranean and south of Russia. Falling light and variable in Norway later, and shifting to North-East over the north of Scotland.

Barometer highest, 30·2 ins. to 30·0 ins. over Spain, the Bay of Biscay, France, and the extreme south and south-west of our Islands; (2) 29·9 ins. to 30·0 ins. over Finland and the north of Russia. Lowest, 29·6 ins. and less in a depression over Scotland, and in another over the south of Russia, and below 30·0 ins. in a shallow secondary over Corsica and the Gulf of Genoa. Scotch depression moving south-eastwards later, that over the south of Russia filling up.

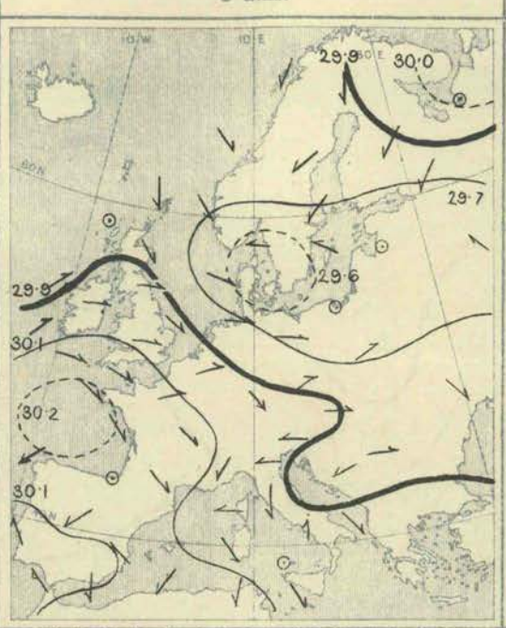
Judd & Co Ltd Lith 63 Carter Lane

Tuesday, 18th July.

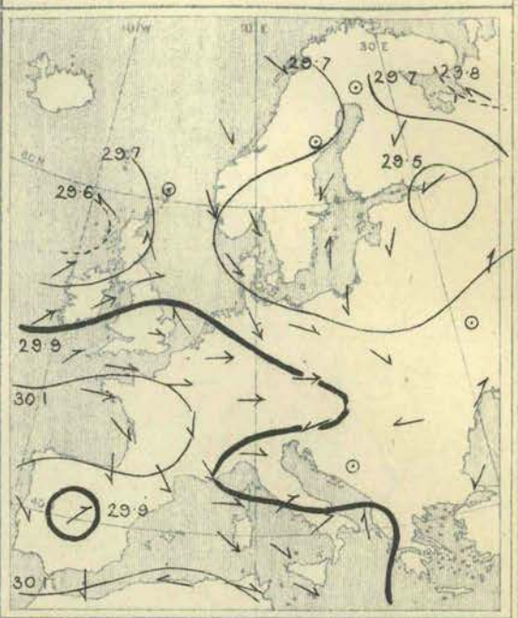
Temperature and Weather. — 8 a.m.



Barometer and Wind. — 8 a.m.



Barometer and Wind. — 6 p.m.



Weather in morning fine and bright (1) over the Mediterranean and the Iberian Peninsula, (2) over the north of France, the southern and midland parts of England, and the east and north of Scotland, and (3) over the north of Russia, Finland, and the greater part of Sweden; cloudy or overcast elsewhere, with rain at several stations in the west of our Islands and over central Europe. Rain falling later in nearly all parts of our Islands, and the countries lying to the eastward of the North Sea—amounts considerable at several of our north-western and northern stations, at Fanö, and Oxö, as well as at Buda-Pesth.

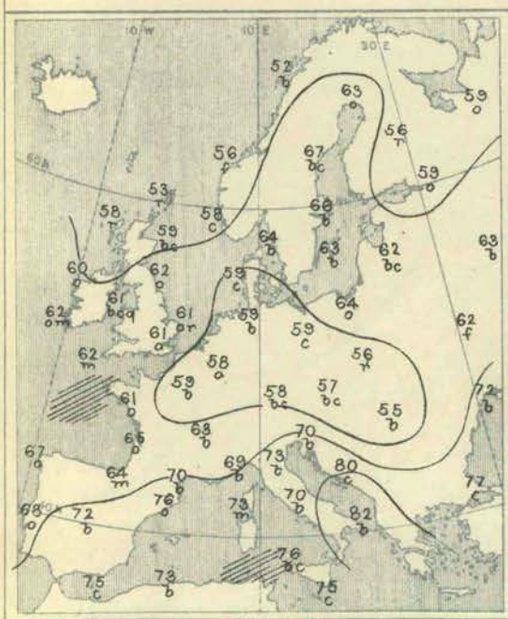
Temperature risen considerably over Finland, changed little elsewhere. Morning readings highest, 80° at Sfax, 70° to 77° on the Spanish coasts and shores of the Mediterranean, and exceeding 65° on many parts of the Baltic coasts and over Finland. Lowest, 52° at Malin Head, 53° at Bodö and at Münster, and 55° at Sumburgh Head. Rising later to 60° and more over Scotland, Ireland, Germany, and the north of France, to 71° at Dungeness, 73° at Cambridge, 77° at Nice and Biarritz, and 88° at Lisbon and Palermo, and 106° at Laghouat.

Wind (1) Easterly, moderate, over northern Europe, but Westerly and North-Westerly over the central and southern countries; (2) South-Westerly in Ireland, Southerly and calm in Scotland, Westerly to North-Westerly, fresh, over England. Backing later to South-West over our western districts generally, and freshening and becoming South-Easterly, moderate, in the north of Scotland, but strong from North-West at Skudesnaes and Cuxhaven.

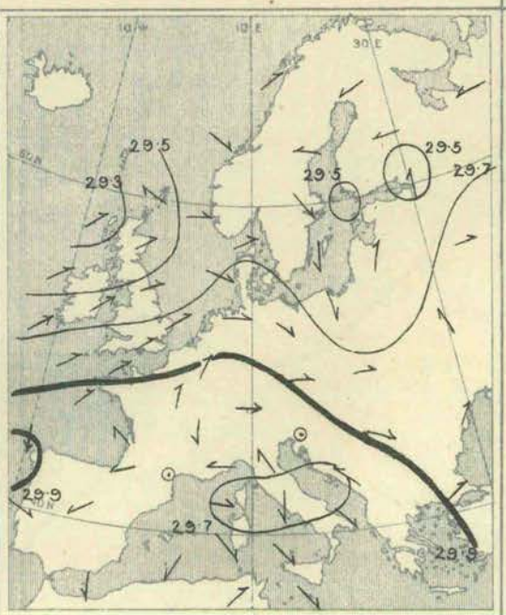
Barometer highest, 30·2 ins. and more over the Bay of Biscay, and exceeding 30·0 ins. over Spain. France, the Channel, and south-western parts of our Islands. Lowest, (1) 29·6 ins. and less in a depression over Denmark, the Kattegat and Sound, and below 29·7 ins. over north Germany, the Baltic Provinces, the Baltic, and central Russia; (2) below 30·0 ins. over Corsica and the Gulf of Genoa, as well as off our north-western coasts. Well-marked depression coming over our north-western districts later from the Atlantic. Depression over Denmark advancing towards the Baltic and filling up, but new one forming near St. Petersburg.

Wednesday, 19th July.

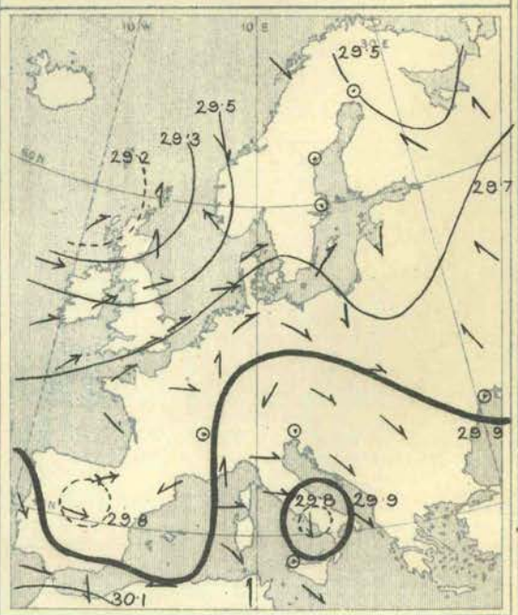
Temperature and Weather. — 8 a.m.



Barometer and Wind. — 8 a.m.



Barometer and Wind. — 6 p.m.



Weather in morning fine and bright over south-western and southern Europe, and temporarily so over the Netherlands and the Baltic coasts—cloudy or overcast elsewhere, very showery over many parts of the British Islands, and changeable over north-western Europe generally; rainy at Warsaw and Cracow also. Rain later over the United Kingdom and North Sea generally, and in some parts of France—amounts of fall large at Oxford, Cambridge, and Cuxhaven, considerable at Cracow, Lemberg, and Odessa.

Temperature changing fitfully. Morning readings highest, 82° at Brindisi, and above 70° at nearly all the Mediterranean stations, at Constantinople, and Odessa; above 60° over the greater part of Ireland and England, and on the Swedish and north German coasts. Lowest, 52° at Bodö, 53° at Sumburgh Head, 55° at Hangö, 56° at Kuopio, Christiansund, and Wick. Rising later to 70° or more in several parts of Sweden, Scotland, England, Germany, and the northern half of France, and to between 80° and 84° in the southern parts of France, to 86° over the south of Italy and 90° and more over Algeria. Succeeding night warm over England.

Wind variable but chiefly North-Easterly to North-Westerly over northern Europe; Westerly over Germany and central Europe. South-Westerly over the British Islands as a whole, and blowing freshly in places, South-Easterly at Sumburgh Head. Very variable over south-western, southern, and south-eastern Europe. South-Westerly wind becoming still stronger over the British Islands later, and a strong South-Easterly breeze setting in at Skudesnaes. Westerly breeze over Germany decreasing in force.

Barometer highest, 30·0 ins. and more to 29·9 ins. over south-western and southern Europe, but form of system very irregular. Lowest, 29·3 ins. and less to 29·4 ins. over Scotland, the Hebrides, and the extreme north of Ireland, and 29·5 ins. to 29·6 ins. over Finland and the Baltic Provinces—these systems also of irregular form. Falling over our Islands later as the depression in the north-west spread south-eastwards over the Kingdom and the North Sea.

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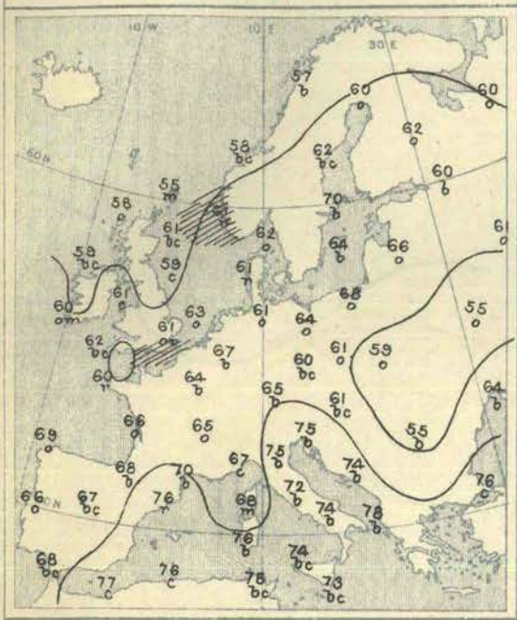
Thursday, 20th July.

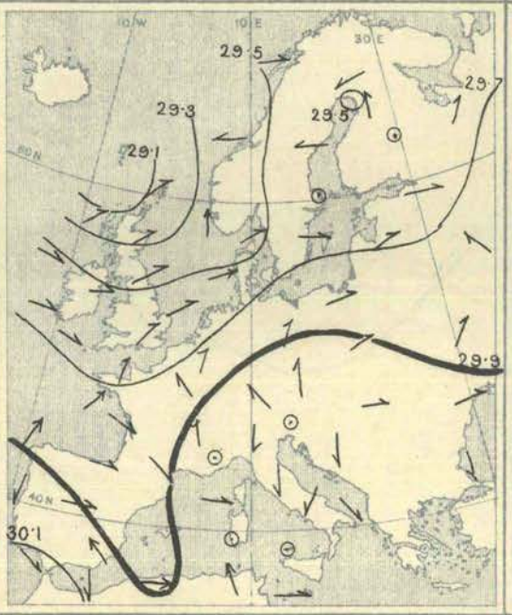
Temperature and Weather.

8 a.m.

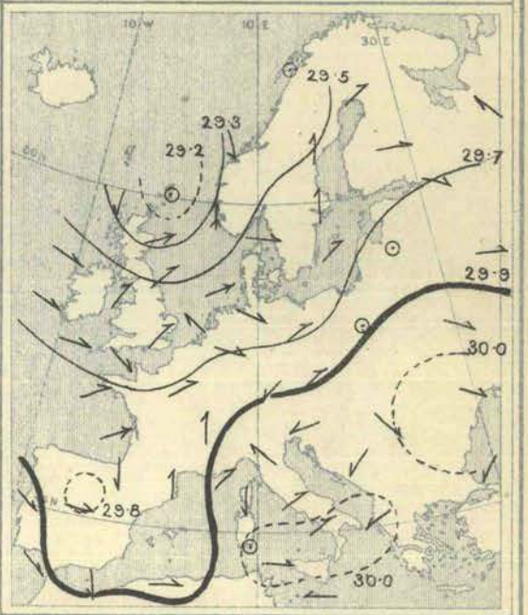


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning fine and bright over south-eastern, southern, and the greater part of south-western Europe, as well as over Belgium, the Baltic, and northern half of Scandinavia, also over Ireland and the west of England; cloudy or overcast elsewhere, with rain over Brittany, the Channel Islands, our south-eastern and midland counties, in Denmark, and the south of Norway, thunder at Biarritz. General condition very changeable over the northern countries. Rain later over France and the south of our Islands and also in the extreme north—amounts large in many places; fair weather in the north-east, but conditions still very unstable.

Temperature still changing rather fitfully. Morning readings highest, 70° to 78° over the greater part of the Mediterranean coasts, 76° at Constantinople, and above 60° except at the most northern and north-western stations. Lowest, 55° at Sumburgh Head, 56° at Malin Head, 57° at Bodö, 58° at Christiansund and Ardrossan, 59° at Belmullet and Shields. Rising to 70° and more over our midland counties later, to between 80° and 83° in many parts of France, and to between 80° and 88° over central Germany, and to between 90° and 104° over Algeria.

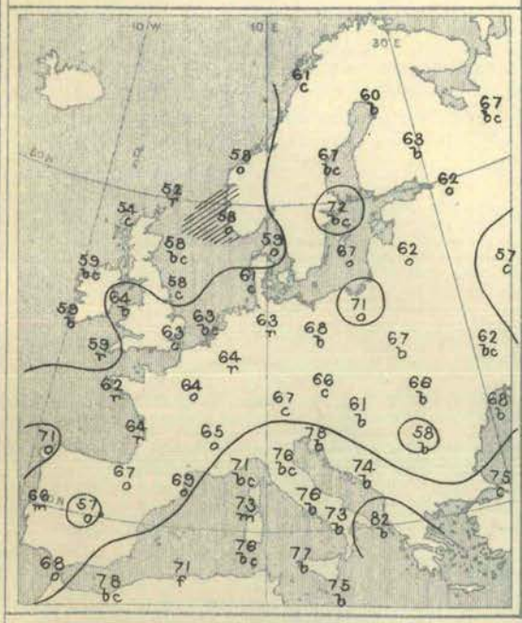
Wind light to moderate and very variable over eastern and southern Europe and the Mediterranean, moderate Westerly at our western stations, fresh to strong from South-West over Brittany and the south-east of England, moderate to light from South-West on our east and north-east coasts, strong Southerly at Skudesnaes, light Easterly at Sumburgh Head. Moderating over the south-east of England later, and backing to South-East at Yarmouth, and to South-West at Rochefort, but veering to North-West on our south-west coasts.

Barometer highest, 30·0 ins. and more to 29·9 ins. over the south-western half of Spain, and also over south Germany, Austria-Hungary, and the south-eastern countries of Europe generally. Lowest, 29·2 ins. and less in a depression having its central area over the most northern parts of Scotland, the Shetlands, and Hebrides, and neighbouring parts of the Atlantic; shallow secondary systems over England and northern Europe. Rising over our Islands later, but distribution remaining irregular.

Friday, 21st July.

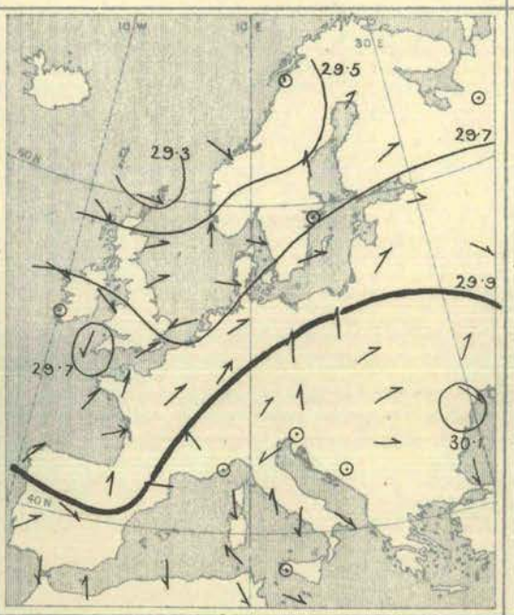
Temperature and Weather.

8 a.m.



Barometer and Wind.

8 a.m.



6 p.m.

Weather in morning fine and bright over central and south-eastern Europe and on the southern side of the Mediterranean, as well as in many parts of the British Islands and northern Europe; cloudy or overcast elsewhere—with rain over the south-west of England, the western part of the Channel, in the south-west of France, and at Brussels and Cuxhaven. Rainfall very considerable later at several of the western and central French stations, at Brussels, Cambridge, and in north Germany and the north-west of Norway; thunderstorms in France. Showers in the west and north of the United Kingdom.

Temperature not changing very decidedly. Morning readings highest, 82° at Brindisi, 81° at Sfax and Aumale, and above 70° at the Mediterranean stations generally, at Constantinople, and on the north German coast; above 60° at nearly all the Continental and English stations. Lowest, 52° at Sumburgh Head, 54° at Stornoway, and 55° at Nairn. Rising later to 70° or more over England, to between 72° and 82° over France, and to 88° at Berlin, to between 80° and 90° over Italy, and to more than 100° over central Algeria.

Wind light and anticyclonic over south-eastern and the greater part of southern Europe, but chiefly Easterly in the south-west of France, Southerly over Algeria and Portugal; mainly Westerly over the north of our Islands, Southerly over Germany and at Skudesnaes, but a small cyclonic circulation prevalent over Brittany, the mouth of the Channel and south-west of England. Latter system moving eastwards later, but becoming feeble and finally breaking up.

Barometer highest, 30·0 ins. and more to 29·9 ins. over all the southern and south-eastern countries. Lowest, 29·3 ins. and less to 29·4 ins. over the Shetland Islands and off the extreme north-west coasts of Europe, and below 29·7 ins. in a shallow depression over the south-west of England. Rising over north-western and western Europe later; the shallow depression in south-west moving eastwards and filling up.

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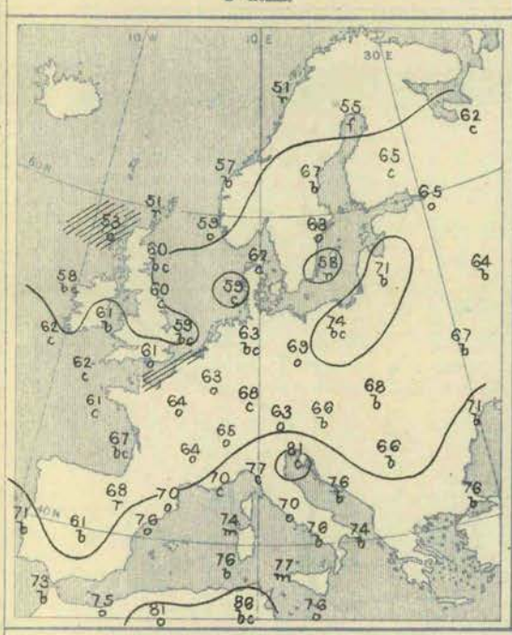
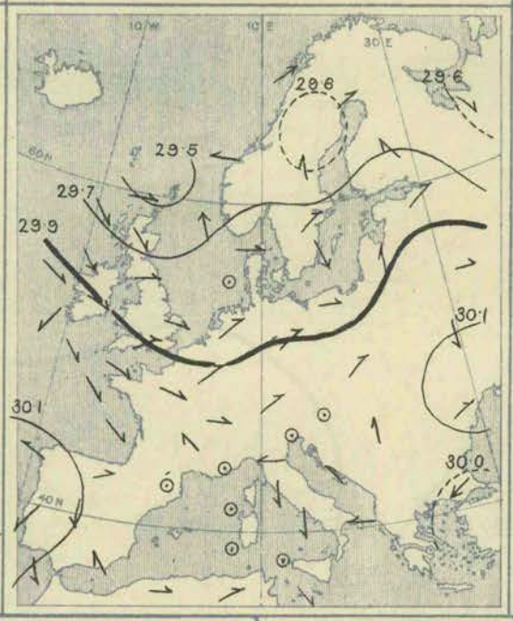
Saturday, 22nd July.

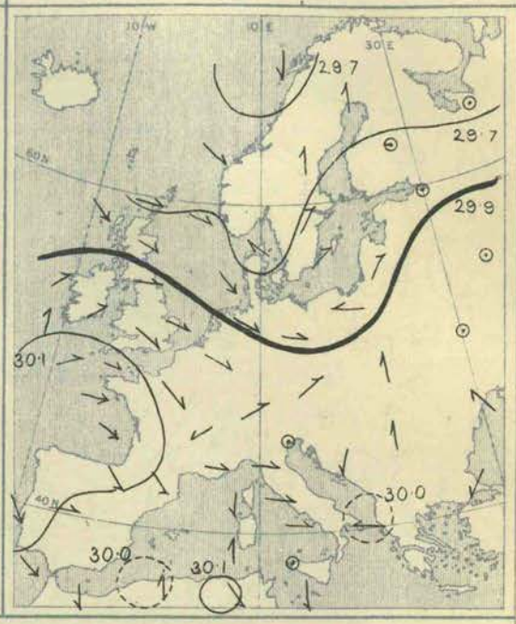
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over south-eastern, central, and south-western Europe, as well as in many parts of Ireland and England, and at most of the Baltic stations—dull over France, cloudy and rainy in the Shetlands and Norway, showery at Malin Head. Rain falling later at our northern and western stations, as well as in many parts of southern and central Europe and on the shores of the Baltic—amount large (1·1 ins.) at Berlin, and exceeding 0·6 in. at Belfort, and 0·3 in. at the Scaw and Valencia Island.

Temperature risen over central and eastern Europe. Morning readings highest, 80° to 86° in some parts of Algeria, and above 70° on the coasts of southern and south-eastern Europe generally; above 60° except in the extreme north-west, but lowest, 51° at Bodö, Christiansund, and Sumburgh Head, and 52° at Wick. Rising later to 70° and a little more over our south-eastern and southern counties and the northern parts of France, to 77° at Berlin, and to rather more than 80° at Nice, Perpignan, and Lyons.

Wind light to moderate in force and variable in direction over the south-western, southern, and south-eastern parts of the Continent; stronger in the north-west and north, and mainly (1) North-Westerly to Westerly over the United Kingdom, South-Westerly over the North Sea, South-Easterly to Easterly in the west of Norway; (2) North-Westerly at Wisby, South-Westerly to Southerly on the eastern side of the Baltic and over the Gulf of Finland. Backing to South-West and South on our western coasts later, but veering to north-west in Norway and Denmark and to North at Bodö.

Barometer 30·1 ins. and more to 30·0 ins. in two large high-pressure systems covering the whole of south-eastern and south-western Europe. Lowest, 29·5 ins. and less in a depression over or near to the Shetlands, and 29·6 ins. and less in another over the north of Sweden. Gradients slight to moderate and variable. Rising over north-western Europe during the day, but beginning to fall again in the west of Ireland towards night.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are show by arrows, which are drawn flying *with the wind*, the force is indicated thus : ⟫⟶ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breese: and ⊙ = a calm. In the left-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Germany, Sweden, and Norway, and 7 a.m. in France, Algeria, Italy, Austria, and Russia; that for 6 p.m. is prepared from observations made at 6 p.m. in the British Islands and France, 7 p.m. in Algeria, 8 p.m. in Sweden and Norway, Germany, and Austria, and 9 p.m. in Russia, Belgium, and Italy. The time indicated in each case is the standard time for each country.

GENERAL NOTES.

In the course of this week the weather has been in a changeable unsettled condition over the greater part of Europe, but more especially over the northern and north-western countries. In these regions large depressions (of no great depth) have been observed moving from south-west to north-east outside our north-west and northern coasts, causing considerable falls of rain over the western and northern parts of the United Kingdom; in addition to these, small systems have advanced over the more southern districts, causing heavy local showers, accompanied in some instances by thunder and lightning. One such system passed across the south of England to Belgium and Germany during Sunday, with the result that falls of rain varying from 1 to 3 ins. in depth were recorded in the south of England, the Netherlands, and north-east of France—the consequences being seriously felt at Eastbourne on Sunday morning.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 170.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	STATIONS	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	46·2	?	40	?	EASTBOURNE	30·6	?	28	
OSWALDKIRK (Yorkshire)	44·0	?	39	?	TENBY	42·0*	?	38*	?
WORKSOP	48·2	+12·2	43	+11	NEWQUAY	39·0	?	36	?
THURCASTON (Leicestershire)	40·8	+ 3·6	36	+ 3	TORQUAY	35·6*	?	33*	?
MARGATE	31·1	?	28	?	ARLEY COTTAGE (County Cavan)	54·3	?	48	?
WESTBOURNE (Sussex)	36·6 *	?	33*	?	GUERNSEY	47·9*	?	44*	?
BRIGHTON	36·4	?	33	?					

* The values at Westbourne, Tenby, Torquay and Guernsey are obtained by Jordan's Photographic Recorder.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W. R. H. SCOTT, F.R.S., SECRETARY.

By whom Subscriptions, payable in advance, can be received.

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VOL. X. No. 30.] *Third Series.* WEEK ENDING SATURDAY, 29TH JULY, 1893. [*Price 6d.* *Annual Subscription, post paid*, £1 10s. 0d.

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871-90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the twenty-five years 1866-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the ten years 1881-90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

	DISTRICTS. (See p. 176.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 1st, 1893. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		*	*	*	*	*	*	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH -	71	41	62·4	49·1	55·4	0 (average)	94	+12	0	0	1414	+445	485	- 57
	1. SCOTLAND, EAST -	74	41	65·6	49·1	56·8	0 (average)	104	0	0	0	1558	+273	548	- 21
	2. ENGLAND, N.E. - -	72	41	66·1	50·6	57·8	1 below.	111	- 4	0	0	1627	+289	436	- 62
	3. ENGLAND, EAST- -	75	42	69·3	52·6	60·4	1 below.	129	+ 2	0	0	1965	+379	524	- 37
	4. MIDLAND COUNTIES-	75	40	68·7	52·7	60·1	0 (average)	127	+ 5	0	0	2091	+502	505	- 47
	5. ENGLAND, SOUTH -	76	46	69·2	54·9	61·6	0 (average)	137	+ 5	0	0	2145	+432	373	- 43
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST -	70	40	64·1	50·1	56·6	1 below.	102	- 1	0	0	1719	+399	354	- 63
	7. ENGLAND, N.W. - -	71	42	66·4	54·9	59·8	0 (average)	125	+11	0	0	1940	+525	323	- 91
	8. ENGLAND, S.W. - -	74	42	66·9	55·1	60·6	1 above.	130	+11	0	0	2159	+564	246	- 70
	9. IRELAND, NORTH -	76	45	65·5	53·4	59·0	1 above.	119	+14	0	0	1877	+447	258	-104
	10. IRELAND, SOUTH -	75	47	67·8	55·3	61·1	2 above.	134	+20	0	0	2125	+487	178	-100
	—CHANNEL ISLANDS -	71	51	66·9	57·8	32·0	0 (average)	140	+10	0	0	2395	+642	70	- 52

Rainfall.

	DISTRICTS. (See p. 176.)	For the Week. Number of Rainy Days.	Total Fall.	More or less than the mean for the Week.	From Jan. 1st, 1893. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.
			10ths of in.	10ths of ins.			Ins.	Ins.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH -	6	10	2 more.	125	-12	22·0	- 3·4
	1. SCOTLAND, EAST -	5	5	3 less.	103	- 8	13·5	- 3·1
	2. ENGLAND, N.E. - -	3	2	5 less.	88	-15	11·0	- 2·6
	3. ENGLAND, EAST- -	4	4	2 less.	87	-14	10·1	- 3·5
	4. MIDLAND COUNTIES-	4	4	3 less.	87	-13	10·8	- 4·4
	5. ENGLAND, SOUTH -	3	6	0 (average)	82	-15	11·1	- 3·3
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST -	4	7	2 less.	102	-13	18·9	- 7·3
	7. ENGLAND, N.W. -	5	5	3 less.	92	-16	13·7	- 3·6
	8. ENGLAND, S.W. - -	4	7	1 less.	86	-25	16·4	- 4·2
	9. IRELAND, NORTH -	5	5	3 less.	109	-18	16·1	- 3·0
	10. IRELAND, SOUTH -	4	2	5 less.	97	-20	15·7	- 5·3
	—CHANNEL ISLANDS -	5	5	1 less.	92	-26	12·7	- 4·0

Bright Sunshine.

	DISTRICTS. (See p. 176.)	For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 1st, 1893. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH -	30	+ 3	26	+ 3	711	- 77	25	- 3
	1. SCOTLAND, EAST -	34	- 6	30	- 8	889	- 12	32	0
	2. ENGLAND, N.E. - -	30	- 7	27	- 6	988*	+172	33	+ 6
	3. ENGLAND, EAST- -	43	+ 2	40	0	1195	+210	44	+ 8
	4. MIDLAND COUNTIES-	33	- 7	30	- 6	1111	+242	40	+ 8
	5. ENGLAND, SOUTH -	41	- 3	38	- 3	1225	+290	45	+ 11
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST -	28	- 8	25	- 7	1006	+119	36	+ 4
	7. ENGLAND, N.W. -	29	- 3	26	- 4	1012	+137	37	+ 5
	8. ENGLAND, S.W. - -	47	+ 1	43	+ 2	1309	+285	48	+ 10
	9. IRELAND, NORTH -	38	+ 7	34	+ 7	869	+ 44	31	+ 1
	10. IRELAND, SOUTH -	35	0	32	0	961	+ 18	35	+ 1
	—CHANNEL ISLANDS -	50	- 3	47	- 3	1438	+317	55	+ 12

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather continued unsettled, with cloudy skies and somewhat frequent rain, in nearly all parts of the Kingdom until Wednesday. On Thursday and Friday, however, the conditions were finer, and a fair amount of sunshine was experienced. Thunderstorms occurred in some parts of Scotland on Monday, and over the midland, eastern, and south-eastern parts of England on Wednesday.

Temperature did not differ materially from the mean over Scotland and the greater part of England, but slightly exceeded it in Ireland as well as in England S.W. The highest of the maxima were registered either on the 24th or 28th, and ranged from 76° in England S. and Ireland N. to 70° in Scotland W. The lowest of the minima were recorded, as a rule, during the early morning either of the 23rd or 28th. They varied from 51° in the Channel Islands and 47° in Ireland S., to 41° in the north and east of Scotland and the north-east of England, and to 40° in the Midland Counties and Scotland W.

Rainfall exceeded the mean in Scotland N., and just equalled it in England S.; in all other districts there was a deficit.

Bright Sunshine was less than the mean over the greater part of the Kingdom, but slightly exceeded it in the north of Ireland, the south-west of England, and the north of Scotland. The percentage of the possible duration ranged from 47 in the Channel Islands, 43 in England S.W., and 40 in England E., to 26 in Scotland N. and England N.W., and to 25 in Scotland W.

Barometer and Wind.—The distribution of pressure over our Islands was mainly cyclonic, shallow depressions passing eastwards or north-eastwards over different parts of the Kingdom. South-Westerly to Westerly or North-Westerly winds were consequently most prevalent, but on the 27th and 28th, when the distribution of pressure was temporarily anticyclonic, Northerly or variable winds were experienced.

* This value has been altered owing to the receipt of further information for a preceding week.

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II.—DATA from which the SUMMARY on page 175 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.)								Rainfall.			Bright Sunshine.			
		Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°				Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	60	47	57·0	49·3	53·4	+ 0·5	80	0	5	1·21	+0·64	*	*	*	*
	Stornoway	62	42	61·0	47·7	53·9	- 0·8	83	0	6	0·64	-0·05	33·2	+ 3·4	29	+ 3
	Wick	71	41	62·9	49·9	56·0	+ 0·6	98	0	7	1·34	+0·78	*	*	*	*
	Lairg Ⓢ	69	48	64·5	49·6	56·5	+ 1·1	102	0	7	0·84	+0·14	*	*	*	*
	Glencarron Ⓢ	67	43	63·2	48·3	55·2	+ 0·6	92	0	5	1·60	+0·15	*	*	*	*
	Fort Augustus Ⓢ	71	44	65·4	49·2	56·7	0·0	103	0	5	0·53	-0·19	25·2	?	22	?
	Fort William Ⓢ	68	42	63·0	49·8	55·9	- 0·8	97	0	6	1·09	-0·19	31·1	?	27	?
1. SCOTLAND, E.	Nairn	71	42	66·4	49·1	57·2	- 0·3	106	0	7	0·44	-0·19	*	*	*	*
	Aberdeen	71	47	63·7	50·4	56·6	- 0·5	102	0	6	1·15	+0·45	28·8	- 8·0	25	- 8
	Braemar Ⓢ	66	44	62·9	48·9	54·3	- 0·4	86	0	7	0·39	-0·33	43·7†	?†	38†	?†
	Ochtertyre Ⓢ	74	41	69·9	48·0	58·2	+ 1·0	113	0	3	0·18	-0·62	*	*	*	*
	Leith Ⓢ	72	46	66·9	50·7	58·2	- 0·5	113	0	4	0·25	-0·38	*	*	*	*
	Marchmont Ⓢ	69	43	64·0	49·4	56·2	- 0·8	99	0	4	0·28	-0·53	33·5	?	30	?
2. ENGLAND, N.E.	Alnwick Castle	68	44	64·4	50·9	57·2	- 0·3	106	0	2	0·19	-0·51	*	*	*	*
	Durham	72	41	68·0	47·5	57·0	- 2·3	105	0	3	0·08	-0·59	26·9	-10·0	24	- 9
	Shields	70	45	64·6	48·6	56·0	- 2·2	98	0	4	0·34	-0·36	*	*	*	*
	Scarborough Ⓜ												*	*	*	*
	York	71	45	68·7	51·6	59·6	- 0·1	123	0	3	0·14	-0·50	33·5	- 2·2	30	- 3
	Spurn Head	69	52	65·0	54·6	59·4	- 0·8	122	0	3	0·05	-0·37	*	*	*	*
3. ENGLAND, E.	Hillington Ⓜ	75	42	70·2	50·8	59·8	- 1·1	125	0	3	0·42	-0·28	45·5	+ 1·9	41	+ 2
	Yarmouth	75	50	67·9	55·4	61·2	+ 0·2	134	0	2	0·27	-0·43	*	*	*	*
	Geldeston	75	44	69·5	52·0	60·1	- 1·0	127	0	5	0·33	-0·23	47·6	+ 1·3	44	+ 1
	Cambridge	75	44	70·6	52·4	60·9	- 0·5	132	0	4	0·49	-0·03	40·6	- 3·3	37	- 3
	Rothamsted	72	45	68·4	52·4	59·8	- 0·4	125	0	4	0·69	+0·08	39·9	?	37	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	73	41	68·9	49·6	58·6	- 1·8	116	0	5	0·36	-0·26	*	*	*	*
	Loughborough	75	45	70·9	52·3	61·0	- 0·5	133	0	3	0·50	-0·06	*	*	*	*
	Stamford (Ketton Hall)	75	40	71·0	50·6	60·1	- 1·3	127	0	3	0·19	-0·38	*	*	*	*
	Cheadle Ⓜ	68	48	65·0	51·8	57·9	0.0	111	0	4	0·68	-0·04	*	*	*	*
	Churchstoke Ⓜ	69	47	67·5	52·3	59·4	+ 1·3	122	0	3	0·23	-0·42	34·5	- 5·2	31	- 5
	Hereford Ⓜ	73	51	70·4	55·7	62·5	+ 2·1	144	0	4	0·22	-0·36	*	*	*	*
	Cirencester	71	50	67·1	53·9	60·0	+ 0·6	126	0	4	0·40	-0·34	35·3	- 5·7	32	- 6
	Oxford	73	51	69·0	55·1	61·6	+ 0·4	137	0	4	0·26	-0·34	36·7	- 6·3	34	- 5
5. ENGLAND, S.	London	74	48	71·3	54·7	62·4	- 0·3	143	0	3	0·63	+0·10	35·4†	- 4·4†	32†	- 5†
	North Foreland	75	52	68·7	55·7	61·8	+ 0·1	139	0	3	0·76	?	*	*	*	*
	Strathfield Turgiss Ⓜ	74	46	71·2	50·9	60·3	- 1·1	128	0	4	0·61	+0·07	*	*	*	*
	Dungeness	70	48	68·4	55·1	61·3	- 0·6	135	0	3	0·33	-0·14	*	*	*	*
	Hastings (St. Leonards)	73	52	67·3	56·5	61·5	- 0·6	137	0	3	0·89	+0·36	45·9	- 3·9	43	- 3
	Southampton	76	53	71·0	55·6	62·8	+ 0·6	146	0	3	0·52	- 0·14	41·3	- 5·7	38	- 6
	Hurst Castle	71	53	68·9	57·3	62·7	+ 0·7	145	0	2	0·55	+0·05	*	*	*	*
	Stowell Ⓜ	70	48	66·9	53·5	59·7	- 0·4	124	0	3	0·34	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	70	43	64·4	50·5	57·0	- 0·1	105	0	6	1·27	+0·02	*	*	*	*
	Glasgow	69	44	64·3	50·3	56·8	- 0·5	104	0	3	0·76	-0·09	24·5	- 3·9	22	- 3
	Ardrossan	68	45	63·7	51·9	57·4	- 0·8	108	0	4	0·46	-0·24	*	*	*	*
	Glenlee Ⓢ	68	40	64·3	48·0	55·6	- 1·3	95	0	4	0·54	-0·51	*	*	*	*
	Douglas (Isle of Man)	67	46	63·8	50·0	56·4	- 1·1	101	0	5	0·55	-0·21	30·9	-10·9	28	- 9
7. ENGLAND, N.W.	Stonyhurst	67	50	64·2	53·3	58·4	- 0·4	115	0	6	0·64	-0·44	26·4	- 8·9	24	- 8
	Blackpool Ⓜ	68	52	66·4	55·9	60·8	+ 0·9	132	0	6	0·15	-0·63	31·1	- 8·0	28	- 7
	Manchester	68	50	66·6	52·4	59·0	+ 0·4	119	0	6	1·08	+0·14	14·9†	?	14†	?
	Liverpool Obsy. (Bidston)	69	42	66·9	53·9	60·0	0·0	126	0	5	0·71	+0·01	*	*	*	*
	Llandudno Ⓜ	71	52	67·2	55·5	60·9	+ 0·7	132	0	2	0·10	-0·56	43·3	+ 7·0	39	+ 5
	Holyhead	68	52	66·4	55·3	60·5	+ 1·0	130	0	2	0·19	-0·41	*	*	*	*
8. ENGLAND, S.W.	Llandovery	73	42	70·0	52·0	60·4	+ 1·0	129	0	6	0·39	-0·60	*	*	*	*
	Pembroke	66	54	63·9	57·1	60·3	+ 1·4	128	0	2	0·50	-0·11	46·2	+ 1·5	42	0
	Bristol (Montpelier)	74	54	69·8	57·4	63·2	+ 2·8	148	0	3	0·54	?				
	Arlington (N. Devon)	69	45	65·3	53·4	58·9	+ 0·3	118	0	4	1·00	+0·76	*	*	*	*
	Cullompton Ⓜ	74	45	69·4	53·3	60·8	+ 1·1	132	0	4	0·59	-0·09	45·0	+ 6·2	42	+ 5
	Falmouth	68	53	65·8	56·4	60·8	+ 0·7	132	0	2	0·59	-0·24	44·1	- 1·7	41	- 4
	Plymouth	69	48	66·6	55·5	60·7	- 0·8	131	0	4	0·70	0·00	43·7	+ 1·0	41	0
	Prawle Point	67	52	64·0	55·4	59·4	- 0·2	122	0	5	0·51	-0·04	*	*	*	*
9. IRELAND, N.	Malin Head	69	51	62·4	54·4	58·1	+ 0·4	113	0	4	0·89	?	*	*	*	
	Londonderry	76	48	67·8	52·1	59·4	+ 1·1	122	0	5	0·80	-0·06	*	*	*	*
	Edenfel (Omagh)	73	45	64·9	51·7	57·8	+ 0·4	111	0	5	0·45	-0·35	*	*	*	*
	Belmullet	68	54	64·1	56·1	59·8	+ 1·4	125	0	7	0·49	?	*	*	*	*
	Markree Castle	73	47	65·7	52·6	58·7	+ 1·6	117	0	5	0·48	-0·24	34·9	+ 6·9	31	+ 4
	Brookeborough	73	46	66·5	52·2	58·9	+ 1·6	118	0	4	0·62	-0·28	*	*	*	*
	Armagh	73	45	67·0	52·2	59·1	+ 1·3	120	0	4	0·19	-0·59	38·6	+10·0	35	+10
	Donaghadee	71	55	65·3	55·7	60·2	+ 3·0	127	0	4	0·09	-0·64	*	*	*	*
	Edgeworthstown												*	*	*	*
10. IRELAND, S.	Dublin	75	50	69·1	55·6	61·9	+ 2·0	139	0	1	0·06	-0·52	51·0	+15·8	46	+12
	Parsonstown	72	47	68·6	53·9	60·7	+ 1·9	131	0	3	0·25	-0·47	27·1	- 4·9	25	- 3
	Kilkenny	74	49	68·9	54·4	61·2	+ 2·5	134	0	3	0·13	-0·49	*	*	*	*
	Waterford	73	48	71·6	53·8	62·1	+ 2·7	141	0	3	0·09	-0·61	*	*	*	*
	Roche's Point	68	54	66·7	56·0	61·0	+ 0·9	133	0	2	0·02	-0·76	*	*	*	*
	Valencia	68	55	64·4	56·6	60·2	+ 1·3	127	0	6	0·24	-0·69	25·9	- 8·8	24	- 9
	Killarney	69	51	66·8	55·7	60·9	+ 2·3	132	0	5	0·32	?	*	*	*	*
	Foynes	70	54	65·9	56·3	60·3	+ 2·4	132	0	5	0·38	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	68	56	65·7	57·9	61·5	+ 1·0	137	0	4	0·59	0·00	*	*	*	*
	Jersey	71	51	68·1	57·6	62·5	- 0·2	144	0	5	0·34	-0·18	49·8	- 3·5	47	- 3

Stations marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

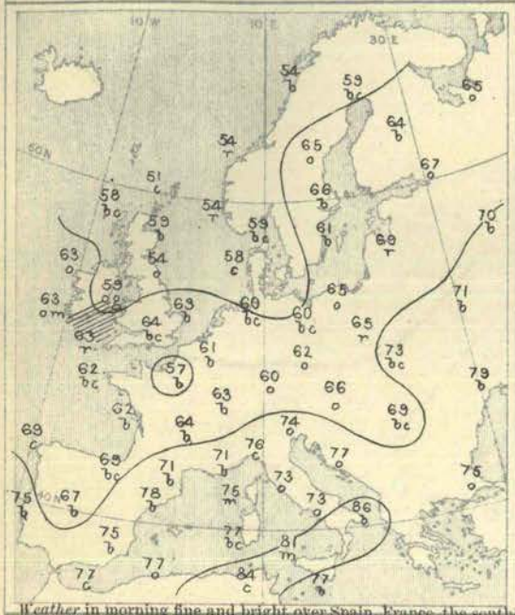
* An asterisk is inserted in all places for which the information is not usually received.

† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row) at the Kew Observatory, and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

Sunday, 23rd July.

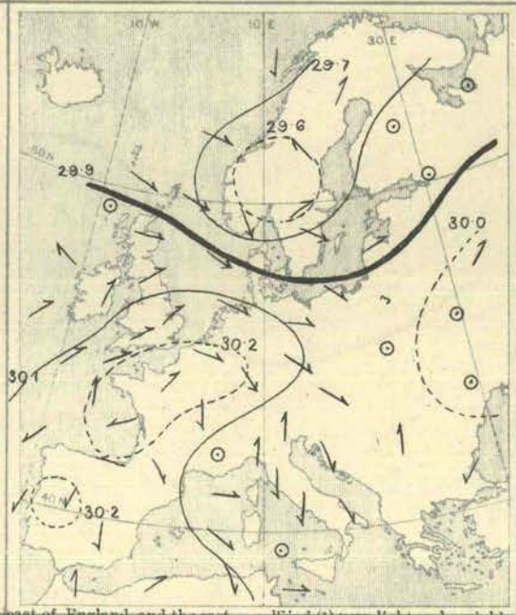
Temperature and Weather.

8 a.m.

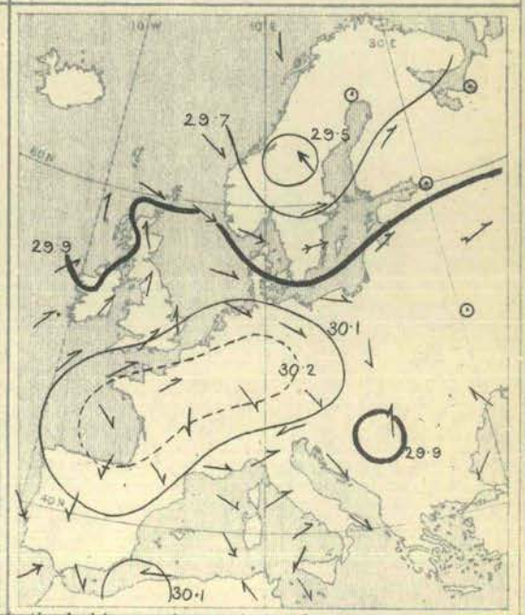


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning fine and bright over Spain, France, the south-east of England, and the east of Scotland, as well as over Finland, cloudy or overcast in Italy and many parts of central Europe, rainy in the western parts of the United Kingdom, and also in the west of Norway. Rain falling later over the greater part of our Islands, the Netherlands, and north and west of France—the fall being considerable at most of our southern stations—but weather fine in the south of France and at Lisbon. Heavy rain occurring at some of the Russian and Austrian stations.

Temperature fallen decidedly over north Germany and the eastern shores of the Baltic, risen over central Russia, little changed elsewhere. Morning readings highest, 86° at Brindisi, 84° at La Calle, 81° at Palermo, and above 70° at the Mediterranean stations generally, as well as over southern and central Russia. Below 60° on the Norwegian and Danish coasts and in the north and north-west of our Islands; lowest, 51° at Sumburgh Head, 54° on the coast of Norway, and 57° at Donaghadee. Exceeding 70° in the south of our Islands later, exceeding 80° in the south of France, and exceeding 90° at several of the Spanish and Italian stations.

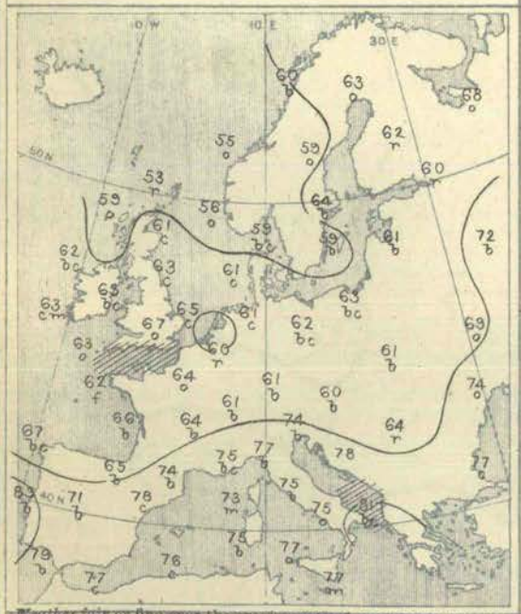
Wind (1) very light and variable (anticyclonic) over eastern, western, and south-western Europe; (2) light to moderate from South-West and South over England, South-Easterly and Easterly in the north of Ireland; (3) Westerly in Scotland, Westerly to North-Westerly, strong to a gale over the south of Norway, Denmark, and the Baltic; South-Easterly, light in the north of Sweden, Northerly at Bodö. Freshening from the Southward over England during day, and shifting to South-West in the north of Ireland. Westerly gale extending to south of Sweden in evening.

Barometer highest, 30·2 ins. and more to 30·0 ins. over Spain, France, Germany, England, and Ireland, and 30·0 ins. and more over the central and southern parts of Russia and the Black Sea. Lowest, 29·6 ins. and less in a depression lying immediately over the southern half of Scandinavia, and below 30·0 ins. over Scotland and the north-western half of Ireland. Falling over our Islands during day as a secondary depression spread over the country from the north-westward. Disturbance over Scandinavia moving north-eastward and becoming deeper.

Monday, 24th July.

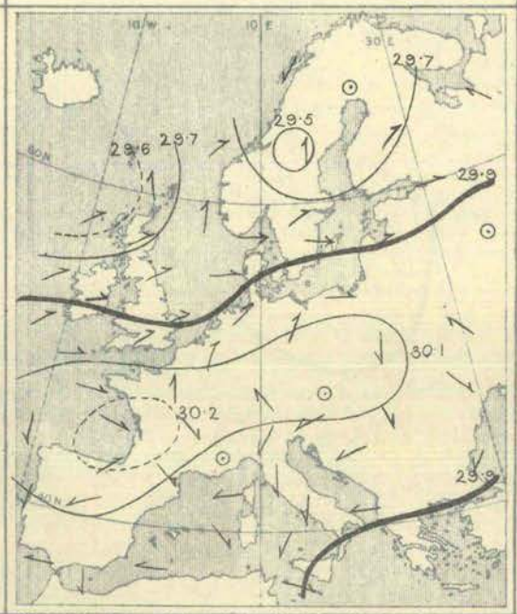
Temperature and Weather.

8 a.m.

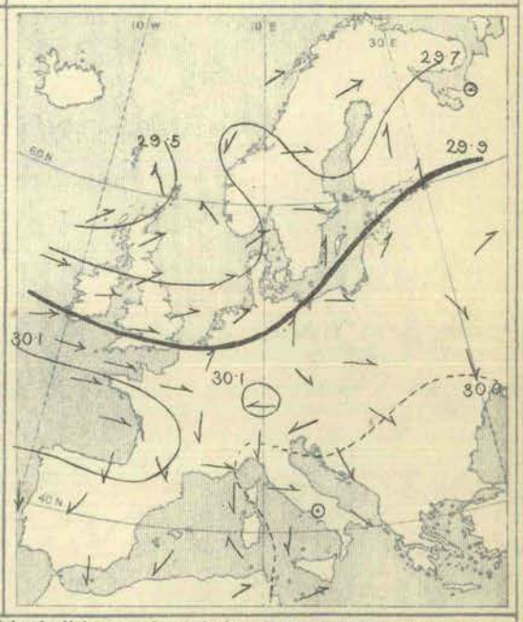


Barometer and Wind.

8 a.m.



6 p.m.



Weather fair or fine over the greater part of our Islands, but showery in a few places; dull and misty over the Channel, rainy at Brussels and Münster. Fine over central and southern Europe generally, as well as at several of the Scandinavian and Danish stations. Rainy in Finland; dull over the southern parts of Russia and Italy. Rain falling during day at many of our own western and northern stations—heavily in the north of Scotland, with a thunderstorm at Wick; weather clearing over the English Channel. Thunderstorms occurring at Nice and Moscow, with heavy rain at the latter station, as well as at Kiev.

Temperature fallen in the eastern and central countries, risen elsewhere. Morning readings highest, 83° at Lisbon and Sfax, 81° at Brindisi, 79° at San Fernando, and 78° at Barcelona and Lesina; above 70° over southern and eastern Europe generally, and above 65° in the south-east of England. Lowest, 53° at Sumburgh Head, 55° at Christiansund, 56° at Skudesnaes, and 58° at Malin Head, Münster, and Cracow. Rising during day to between 70° and 75° in many parts of Great Britain, exceeding 80° over the southern parts of France, and exceeding 90° at several of the Spanish and Italian stations.

Wind South-Westerly over our Islands, light or moderate in force generally, but strong at some of the Channel stations. Light Southerly over the Netherlands, South-Westerly or Westerly over Germany, the Baltic, and the south of Sweden; variable over the northern parts of Scandinavia. Light from North or North-West in Austria, moderate from between North and East over Spain and Italy, Westerly over the Bay of Biscay. Subsequently veering to West in most parts of Ireland and England; no important change occurring elsewhere.

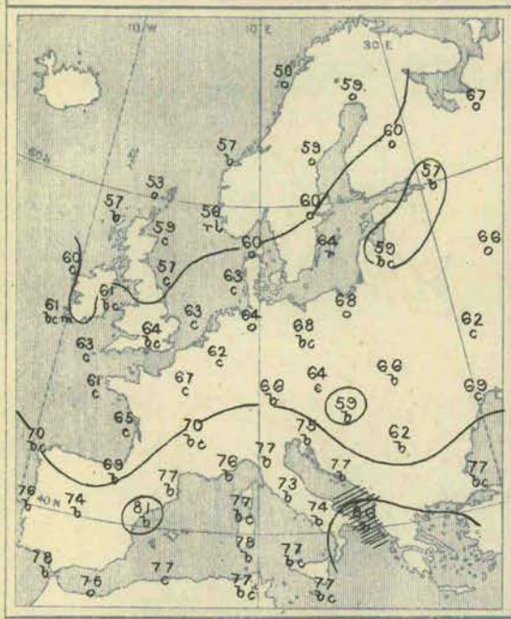
Barometer highest, 30·10 ins. to 30·25 ins. in an anticyclone covering the greater part of Germany, France, and Spain, with the Bay of Biscay. Lowest, 29·5 ins. and less in a small depression lying near Hernösund; 29·6 ins. and less in a larger disturbance lying off the north of Scotland. Former system subsequently filling up, but latter disturbance spreading eastwards; barometer falling in most parts of western Europe.

Judd & Co Lith. 63, Carter Lane.

Tuesday, 25th July.

Temperature and Weather.

8 a.m.

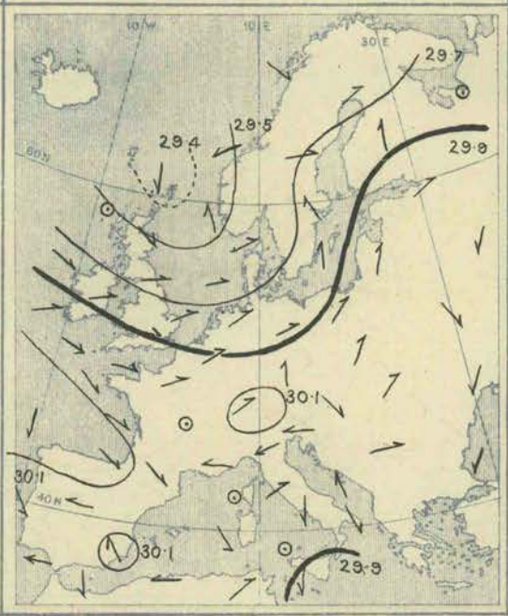


Weather fine in many parts of the United Kingdom, but rainy in the south of Scotland, and showery in the north of Ireland. Fine and bright over the greater part of France, Austria, and southern Europe, but dull in most of the northern and eastern countries, with rain in a few places and with lightning at Skudesnaes. Showers falling during day in many parts of the United Kingdom, and considerable quantities of rain at some of the Scandinavian stations. Thunderstorms occurring in Denmark and Germany.

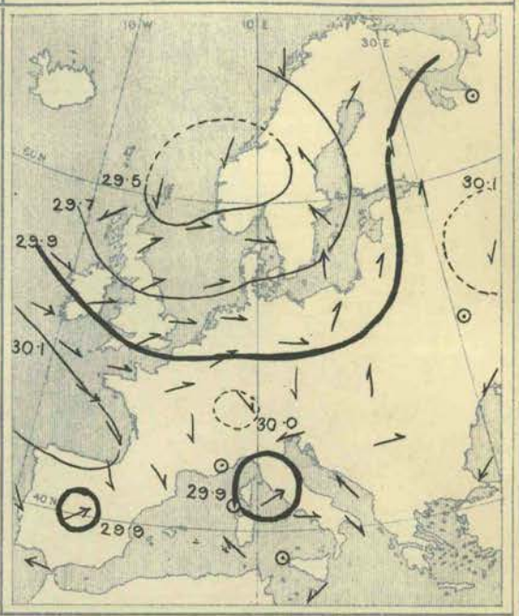
Temperature fallen in our Islands and also in Russia and Italy, risen in most other countries. Morning readings highest, 86° at Brindisi, and 81° at Barcelona, above 75° at most of the Mediterranean stations, and above 70° over southern Europe generally. Lowest, 50° at Bodö, 53° at Sumburgh Head, and 56° at Skudesnaes, Wick, Leith, and Malin Head. Rising during day to a little above 70° over the south-eastern parts of England, and to 80° or more over the southern parts of France and Germany, and to 90° and upwards at some of the Spanish and Italian stations, the highest reading of all being 99° at Madrid.

Barometer and Wind.

8 a.m.



6 p.m.



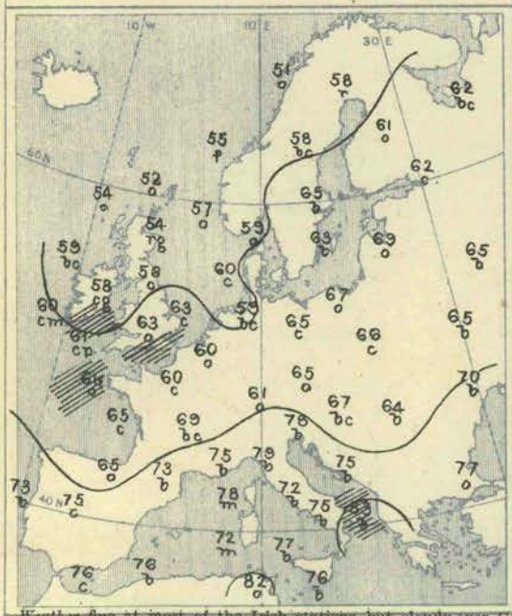
Wind Westerly over our Islands and fresh or strong in force on many parts of our western and southern coasts. South-Westerly over Denmark, the Netherlands, and the greater part of Germany, Southerly over Poland, the Baltic, and Finland; South-Easterly over the southern parts of Scandinavia, South-Westerly over the north of Scandinavia. Variable over Italy, Austria, and the southern parts of Russia, Easterly or North-Easterly in Spain, North-Westerly in the west of France. Subsequently veering to the North-Westward in the west of our Islands; strong gale from the Southward reported over the Christiania Fiord in evening.

Barometer highest, 30·00 ins. to 30·15 ins. in an anticyclone covering a considerable portion of central and southern Europe, and extending eastwards over the more central parts of Russia. Lowest, 29·4 ins. and less in a depression lying off the north of Scotland; 29·9 ins. and less in a shallow system lying to the southward of Italy. Depression in north subsequently moving eastwards, and barometer rising in nearly all parts of the United Kingdom.

Wednesday, 26th July.

Temperature and Weather.

8 a.m.

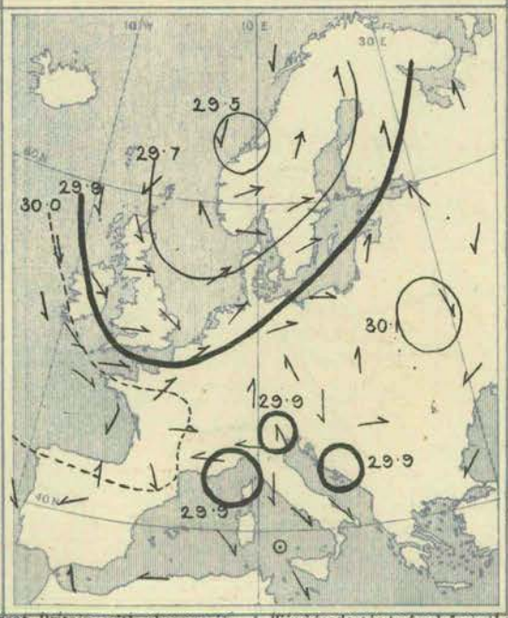


Weather fine at most of the Irish stations, but cloudy over Great Britain, with showers in places, and with thunder at Cambridge. Rainy in Lapland and Finland, dull in the west of Norway, with fog at Christiansund; fine in most other parts of the Continent, but cloudy in the west and north of France. Showers falling during day in many parts of western and central Europe, with thunderstorms at several of the English, French, and German stations.

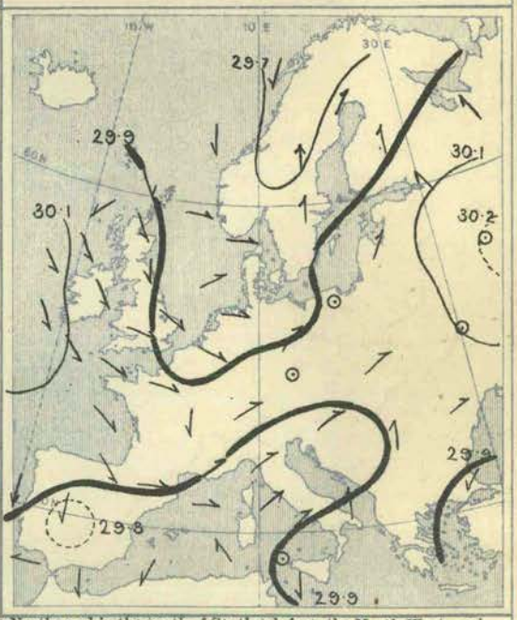
Temperature fallen, excepting in Austria and the south of Russia. Morning readings highest, 83° at Brindisi, 82° at Toulon and Sfax, 79° at Leghorn, and 78° at Trieste and Sanguinaire; above 70° in most parts of southern Europe, and above 65° at some of the central stations. Lowest, 51° at Bodö, 52° at Sumburgh Head, 54° at Stornoway and Aberdeen, and 55° at Wick and Nairn; below 60° in all but the southern and south-eastern parts of the United Kingdom. Rising during day to 70° or a little more at some of our own central and southern stations, exceeding 80° in most parts of southern Europe, the highest readings of all being 97° at Madrid, and 91° at Florence, Rome, and San Fernando.

Barometer and Wind.

8 a.m.



6 p.m.



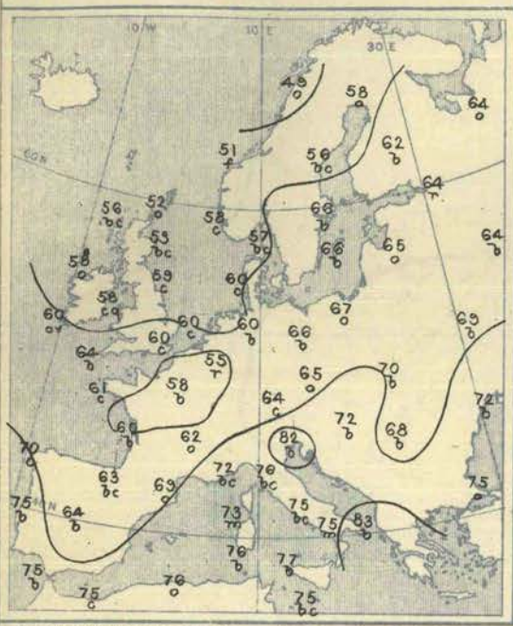
Wind moderate to fresh from the Northward in the north of Scotland, from the North-Westward on our western coasts, from the Westward over the greater part of England, from the South-Westward over the Netherlands, Denmark, north Germany, the Baltic, and the south of Sweden, and from the South-Eastward in Lapland; light from the North-Eastward in the west of Norway. Variable in Austria and the south of Russia. Northerly or North-Westerly in Italy. Variable in the south of France; Easterly or North-Easterly in Spain. Subsequently veering to the North-Westward or Northward over the greater part of England and France; no important change occurring elsewhere.

Barometer highest, 30·0 ins. and upwards in an anticyclone lying over the south-west of Ireland, the Bay of Biscay, the north of Spain, and the greater part of France, as well as in another system of irregular form lying over Russia. Lowest, 29·5 ins. and less in a depression over the west of Norway; 29·9 ins. and less in three or four very shallow disturbances lying over various parts of the Mediterranean and Adriatic. Small secondary disturbances moving southwards across England during day, but barometer rising over the United Kingdom generally. Norwegian depression moving eastwards and partially filling up.

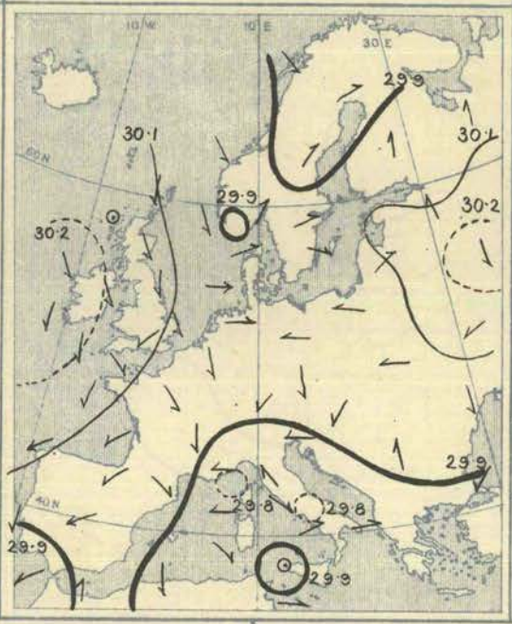
Judd & Co Ltd. Lith 63, Carter Lane

Thursday, 27th July.

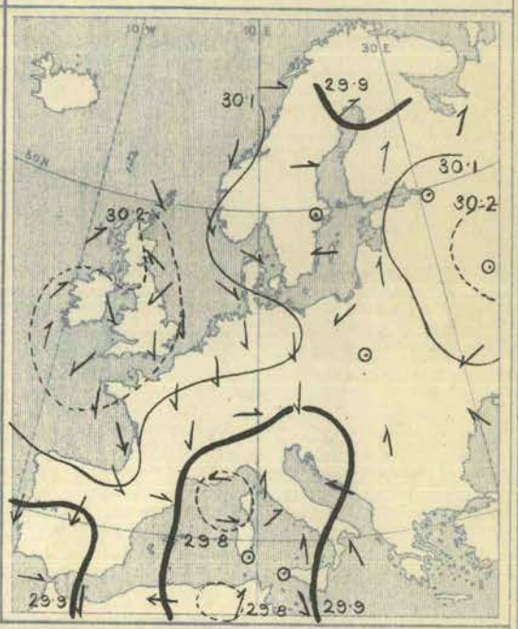
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fair and dry over the greater part of our Islands and the Continent, but dull at some of our extreme northern and north-western stations, as well as in Germany and the eastern parts of France. Rain falling at Liverpool, and also at Brussels and Belfort. A little rain falling during day on our extreme western and northern coasts, and larger amounts in some parts of Germany and the Netherlands. Thunderstorms and heavy rain occurring over the south of France, the north-east of Spain, and the northern and central parts of Italy, the largest amounts being 1·6 ins. at Rome and 1·5 ins. at Turin.

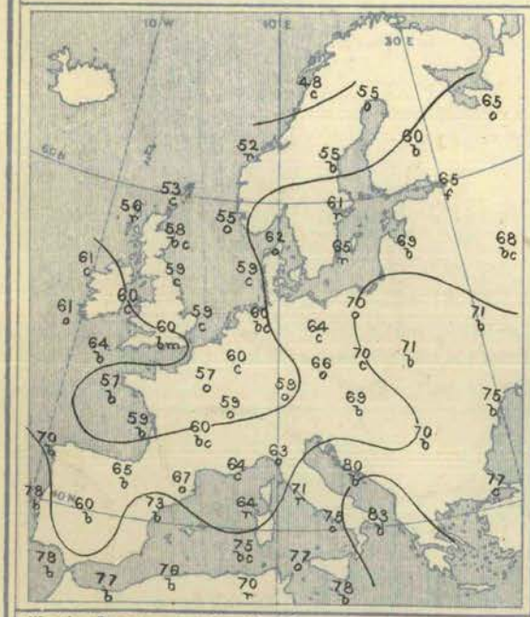
Temperature fallen a little in most countries, but risen over the greater part of Russia and Austria. Morning readings highest, 83° at Brindisi, 82° at Trieste, 81° at Sfax, and 77° at Palermo; above 70° in most parts of southern and eastern Europe. Lowest, 49° at Bodö, 51° at Christiansund, 52° at Sumburgh Head, and 53° at Wick and Aberdeen; below 60° in all but the extreme southern parts of the United Kingdom. Rising during day to between 65° and 70° at most of the English and Irish stations, exceeding 75° in the south of France, and reaching 90° in many parts of Spain and Italy.

Wind light or moderate from the Northward (North-West to North-East) over our Islands and France, fresh from the North-Eastward in Spain, North-Westerly in the west of Norway, Westerly in Denmark, South-Westerly in Sweden, Southerly in Finland. Variable in Germany, Austria, and Italy, light from North or North-East over the central and southern parts of Russia. Subsequently shifting to the Southward on the west coasts of Ireland and Scotland, no important change occurring in other parts of western Europe, but cyclonic circulation of moderate breezes appearing over the south of France and the north of Italy.

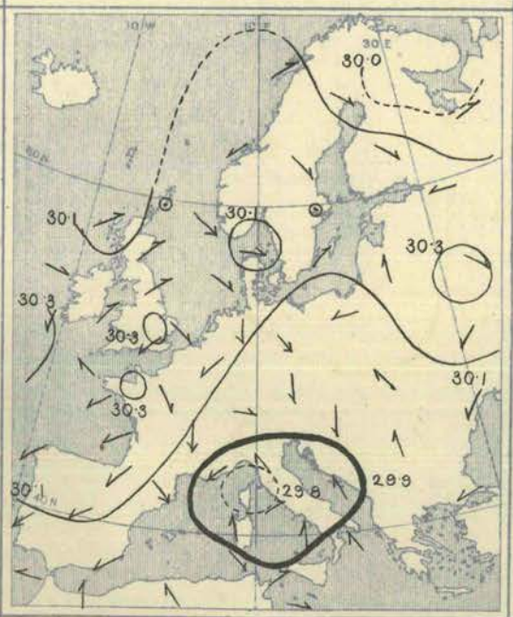
Barometer highest, 30·2 ins. and upwards in an anticyclone spreading over Ireland from the Atlantic, and also in another system lying over central Russia. Lowest, 29·8 ins. and less in a depression over the extreme north of Scandinavia, and also in two small systems lying respectively over central Italy and the Gulf of Genoa. Anticyclone in west subsequently moving eastwards over Great Britain, barometer falling on our extreme western coasts. Scandinavian depression moving north-eastwards.

Friday, 28th July.

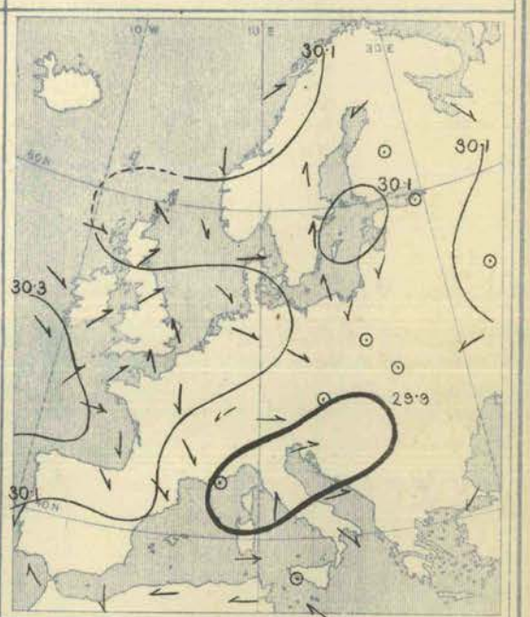
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fine at most of the English stations, but dull in Ireland and Scotland, with mist or fog in several places, and rain on our extreme north-western coasts. Fine and bright over France, Spain, Austria, and the greater part of Russia, cloudy or overcast in most other parts of the Continent, with rain in the south of Sweden, as well as at Turin, Rome, and Cagliari. Rain falling during day in Scotland and the west and north of Ireland, as well as in Germany, Italy, and the south of France; thunder showers occurring in various parts of the London district.

Temperature risen in many parts of the United Kingdom, and also in Russia and Austria, fallen in most other countries. Morning readings highest, 83° at Brindisi, 80° at Lésina, and 78° at Lisbon and San Fernando, above 70° in most parts of southern and eastern Europe. Lowest, 48° at Bodö, 52° at Christiansund, 53° at Sumburgh Head, and 54° at York and Loughborough. Rising during day to 70° or a little above it at many of our own inland stations, as well as over the greater part of France; reaching 80° at Perpignan, and exceeding 90° in several parts of Spain, Portugal, and southern Italy.

Wind variable over the southern parts of our Islands, light from the South-West or West on most parts of our northern coasts. Variable over Scandinavia, Russia, and Austria; North-Westerly or Northerly in Denmark and Germany. Moderate to fresh from the North-East in Spain and the west and south of France, South-Westerly in Italy. North-Westerly breezes setting in later over the south of Ireland, and South-Westerly breezes in the south of England; no important change occurring elsewhere.

Barometer highest, 30·2 ins. to 30·3 ins. in a large anticyclone extending from the Atlantic over Ireland, England, the Netherlands, and the northern parts of France, as well as in another system lying over central Russia. Lowest, 29·8 ins. and less in a depression over the Gulf of Genoa, 30·0 ins. and less over Lapland, 30·1 ins. and less in a shallow "V" shaped disturbance lying off the north-west of Scotland. Depression in north-west subsequently moving eastward, shallow secondary systems passing across Ireland and England. Disturbance over Gulf of Genoa partially filling up.

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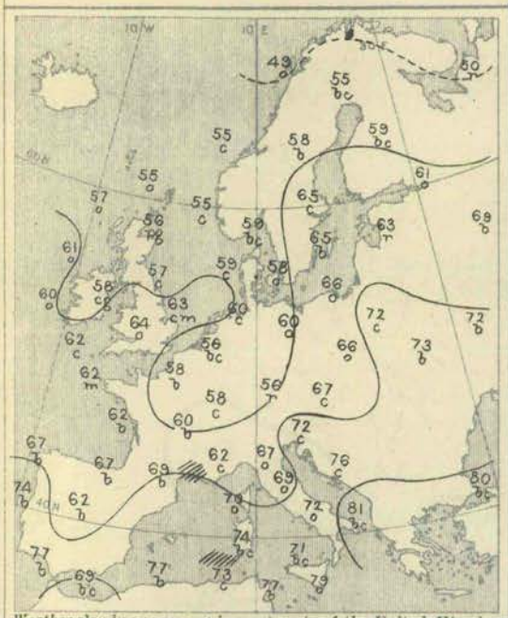
Saturday, 29th July.

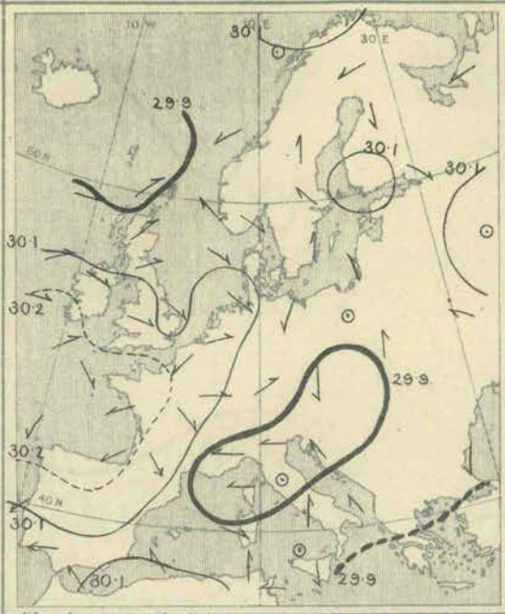
Temperature and Weather.

8 a.m.

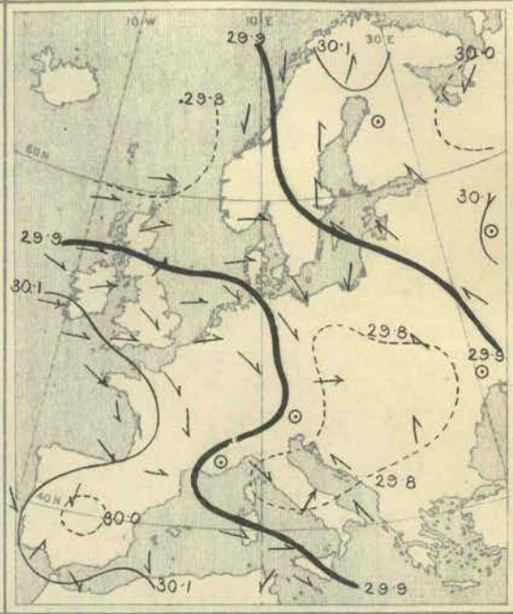


Barometer and Wind.

8 a.m.



6 p.m.



Weather cloudy or overcast in most parts of the United Kingdom, with rain at several of the northern stations. Fine over Sweden, Denmark, France, and the greater parts of southern and eastern Europe; dull in the west of Norway, Germany, and northern Italy, with rain at Wiesbaden and Munich. Showers falling during day in nearly all parts of our Islands and France, and considerable quantities of rain at several of the German and Austrian stations, the largest amount being 1·5 ins. at Berlin. Thunderstorm occurring at Wick.

Temperature changed very irregularly. Morning readings highest, 81° at Brindisi, 80° at Constantinople, 79° at Malta, and 77° at San Fernando, Algiers, and Sfax; above 70° at most of the Mediterranean and Adriatic stations, as well as in the western and southern parts of Russia. Lowest, (1) 40° at Bodö, 50° at Archangel, and 55° at Haparanda, Christiansund, Sumburgh Head, and Malin Head; (2) 55° at Münster, and 56° at Wiesbaden and Munich. Rising during day to 70° or a little above it over the central parts of England, to 75° or more in central France, and to 80° or more over Spain and the southern parts of Italy and Austria, the highest reading of all being 91° at Lisbon.

Wind light from the Westward (South-West to North-West) over our Islands, moderate from the South-Eastward at most of the Scandinavian stations. Northerly in Germany; variable in Russia, Italy, and Algeria; light to fresh from the Eastward or North-Eastward in Spain and the south of France. No important change occurring during day, but wind shifting to the Northward or North-Westward in Spain.

Barometer highest, 30·2 ins. and upwards in an anticyclone extending from the Atlantic over the south of Ireland, the Bay of Biscay, the western parts of France, and the north of Spain, as well as in another system lying over central Russia. Lowest, 29·9 ins. and less in a depression off the north of Scotland, and also in a large shallow system lying over the Gulf of Genoa and the greater part of Italy, Austria, and the Adriatic. Numerous secondary depressions passing eastwards across our Islands during day, and barometer falling a little in most places.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are show by arrows, which are drawn flying *with the wind*, the force is indicated thus : ⇛ = a heavy gale; → = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breese: and ● = a calm. In the left-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds: o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Germany, Sweden, and Norway, and 7 a.m. in France, Algeria, Italy, Austria, and Russia; that for 6 p.m. is prepared from observations made at 6 p.m. in the British Islands and France, 7 p.m. in Algeria, 8 p.m. in Sweden and Norway, Germany, and Austria, and 9 p.m. in Russia, Belgium, and Italy. The time indicated in each case is the standard time for each country.

GENERAL NOTES.

At the commencement of the week an anticyclone lay over Spain, France, and Germany, while depressions skirted our extreme northern coasts on their way from the Atlantic to the Scandinavian peninsula. The prevailing winds were therefore Westerly in all the more northern and north-western countries, with frequent showers; while in the southern regions variable breezes were reported, with fair weather. On the 24th and 25th, the depressions in the north spread southwards, while further low pressure systems were developed over southern Europe and the Mediterranean, so that unsettled weather became more general. The anticyclone in the meantime drifted away to the westward of our Islands, but after the 26th it spread eastward over the greater part of western Europe, the change being accompanied by variable breezes over the United Kingdom, and a decided improvement in the weather. Towards the close of the week the anticyclone became gradually reduced in height and moved slowly southwards, while depressions again began to appear off our extreme northern coasts, so that Westerly breezes and showery weather set in once more over the north-western countries. Large quantities of rain were experienced in Italy and the south of France on the 27th, and in Germany and Austria on the 29th.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 176.

Stations.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	Stations	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	30·0	?	27	?	EASTBOURNE	39·5	?	37	?
OSWALDKIRK (Yorkshire)	29·4	?	26	?	TENBY	48·3*	?	44*	?
WORKSOP	28·2	− 8·2	26	− 7	NEWQUAY	51·5	?	48	?
THURCASTON (Leicestershire)	28·6	− 9·8	26	− 8	TORQUAY	46·8*	?	44	?
MARGATE	42·0	?	39	?	ARLEY COTTAGE (County Cavan)	41·3	?	37	?
WESTBOURNE (Sussex)	41·0 *	?	38*	?	GUERNSEY	49·4*	?	47*	?
BRIGHTON	44·6	?	41	?					

* The values at Westbourne, Tenby, Torquay and Guernsey are obtained by Jordan's Photographic Recorder.

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WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W. R. H. SCOTT, F.R.S., SECRETARY.

By whom Subscriptions, payable in advance, can be received.

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VOL. X. No. 31.] *Third Series.* WEEK ENDING SATURDAY, 5TH AUGUST, 1893. [*Price 6d.* *Annual Subscription, post paid*, £1 10*s.* 0*d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871-90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the twenty-five years 1866-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the ten years 1881-90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

	DISTRICTS. (See p. 182.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 1st, 1893. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	66	40	59·6	48·9	54·0	1 below.	84	+ 2	0	0	1498	+445	485	- 57
	1. SCOTLAND, EAST	70	40	63·0	48·9	55·6	1 below.	95	- 10	0	0	1653	+263	548	- 21
	2. ENGLAND, N.E.	71	48	65·0	52·4	58·4	1 below.	115	0	0	0	1742	+287	456	- 62
	3. ENGLAND, EAST	72	47	67·3	53·0	59·7	1 below.	124	- 2	0	0	2089	+374	524	- 37
	4. MIDLAND COUNTIES	73	40	67·0	52·7	59·4	1 below.	122	0	0	0	2213	+499	505	- 47
	5. ENGLAND, SOUTH	74	45	68·3	54·5	61·0	1 below.	133	+ 1	0	0	2278	+428	373	- 43
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	68	42	62·7	50·8	56·4	1 below.	101	- 2	0	0	1820	+394	354	- 63
	7. ENGLAND, N.W.	68	49	64·2	54·2	58·9	1 below.	118	+ 4	0	0	2060*	+528	323	- 91
	8. ENGLAND, S.W.	73	45	65·6	54·9	59·9	0 (average)	125	+ 5	0	0	2284	+566	246	- 70
	9. IRELAND, NORTH	70	41	62·8	51·8	57·0	1 below.	105	0	0	0	1982	+441	258	-104
	10. IRELAND, SOUTH	72	48	66·2	54·4	59·9	1 above.	125	+11	0	0	2250	+492	178	-100
	—CHANNEL ISLANDS	73	56	67·0	57·7	32·1	0 (average)	141	+10	0	0	2536	+649	70	- 52

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 182.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the mean for the Week.	From Jan. 1st, 1893. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 1st, 1893. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of ins.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	6	10	2 more.	131	-10	23·0	- 3·3	19	- 3	16	- 4	730	- 82	25	- 3
	1. SCOTLAND, EAST	6	8	1 more.	109	- 5	14·3	- 3·9	30	- 8	28	- 8	919	- 21	32	- 1
	2. ENGLAND, N.E.	6	11	5 more.	94	-11	12·1	- 2·1	38	- 2	35	- 2	1026	+173	33	+ 6
	3. ENGLAND, EAST	6	11	5 more.	93	-10	11·2	- 3·0	36	- 9	34	-10	1231	+207	43	+ 7
	4. MIDLAND COUNTIES	5	8	2 more.	92	-10	11·6	- 4·2	43	+ 4	41	+ 5	1154	+246	40	+ 8
	5. ENGLAND, SOUTH	5	7	1 more.	87	-12	11·8	- 3·1	44	- 1	41	- 3	1269	+291	45	+ 10
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	4	9	1 less.	106	-16	19·8	- 7·4	48	+ 12	44	+12	1054	+128	37	+ 5
	7. ENGLAND, N.W.	5	11	3 more.	97	-14	14·8	- 3·3	38	+ 6	35	+ 6	1050	+134	36	+ 4
	8. ENGLAND, S.W.	4	10	2 more.	90	-24	17·4	- 4·0	53	+ 8	50	+ 9	1362	+292	48	+ 10
	9. IRELAND, NORTH	6	12	4 more.	115	-16	17·3	- 2·6	39	+ 7	33	+ 8	908	+ 52	32	+ 2
	10. IRELAND, SOUTH	6	9	2 more.	103	-17	16·6	- 5·1	39	+ 4	36	+ 2	1000	+ 22	35	+ 1
	—CHANNEL ISLANDS	4	5	0 (average)	96	-24	13·2	- 4·1	75	+ 20	72	+19	1573	+328	56	+ 12

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks

Weather was again unsettled and changeable, and at times rainy in all parts of the Kingdom. Thunderstorms were very prevalent over the east and north-east of England towards the end of the period, and the rainfall in those regions was heavy.

Temperature was slightly above the mean in Ireland S., and just equalled it over the south-western parts of England and the Channel Islands. In all other districts there was a slight deficit. The highest of the maxima were recorded at most stations either on the 3rd or 4th, and ranged from 74° in England S., and 73° in the Midland Counties, England S.W., and the Channel Islands, to 66° in Scotland N. The lowest of the minima were registered on August 1st, when the thermometer fell to 40° in Scotland N. and E. and the Midland Counties, to 41° in Ireland N., 42° in Scotland W., and to between 45° and 49° in most other districts; in the Channel Islands, however, the lowest reading was 56°.

Rainfall exceeded the mean in nearly all districts, but just equalled it in the Channel Islands, and was rather less in Scotland W. In the north and east of England the excess was very considerable.

Bright Sunshine was less than the normal in most of the "Wheat Producing," while it was somewhat in excess in the "Grazing" districts. The percentage of the possible duration ranged from 16 in Scotland N., to between 34 and 44 in most other districts, to 50 in England S.W., and to 72 in the Channel Islands.

Barometer and Wind.—During nearly the whole of this period small depressions, secondary to larger systems over Scandinavia, moved south-eastwards over the United Kingdom, causing Northerly to North-Westerly and Westerly winds of moderate strength and frequent showers. Towards the end of the week a more important disturbance moved east-south-eastwards over the northern parts of the Kingdom, and the accompanying subsidiary depressions gave us the sharp thunderstorms noted above.

* This value has been altered owing to the receipt of further information for a preceding week.

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II.—DATA from which the SUMMARY on page 181 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°				Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head S	58	46	55·0	47·6	51·1	− 2·1	63	0	6	1·12	+0·50	*	*	*	*
	Stornoway S	61	40	58·7	47·4	52·7	− 2·0	75	0	6	0·63	−0·12	24·9	− 3·5	22	− 4
	Wick S	65	45	59·7	48·3	53·7	− 1·5	82	0	6	0·70	+0·12	*	*	*	*
	Lairg S	64	45	60·1	49·0	54·2	− 1·0	85	0	6	1·67	+0·97	*	*	*	*
	Glencarron S	66	44	60·3	48·0	53·8	− 0·8	83	0	7	1·24	−0·23	*	*	*	*
	Fort Augustus S	66	49	62·7	50·4	56·2	− 0·5	99	0	5	0·65	−0·05	12·4	?	11	?
	Fort William S	63	49	60·9	51·6	56·0	− 0·7	98	0	5	1·13	−0·17	18·1	?	16	?
1. SCOTLAND, E.	Nairn	68	47	61·1	48·9	54·6	− 1·7	88	0	6	0·77	+0·12	*	*	*	*
	Aberdeen	67	45	61·1	48·9	54·6	− 2·5	88	0	5	0·28	−0·42	27·2	− 9·3	25	− 9
	Braemar S	62	46	59·0	47·5	52·9	− 1·6	76	0	7	1·00	+0·23	31·7†	?†	29†	?†
	Ochtertyre S	70	40	66·7	47·6	56·6	− 0·5	102	0	4	0·89	+0·09	*	*	*	*
	Leith	69	49	66·6	51·1	58·4	− 0·3	115	0	7	1·23	+0·63	*	*	*	*
	Marchmont S	67	47	63·6	49·6	56·2	− 0·6	99	0	7	0·85	+0·04	37·0	?	34	?
2. ENGLAND, N.E.	Alnwick Castle	67	48	62·1	50·6	56·0	− 1·4	98	0	6	0·82	+0·11	*	*	*	*
	Durham	70	48	66·8	50·9	58·4	− 0·7	115	0	7	1·16	+0·53	33·9	− 2·6	31	− 2
	Shields	71	50	64·6	51·9	57·9	− 0·3	111	0	6	0·94	+0·23	*	*	*	*
	Scarborough M	70	51	64·2	53·2	58·4	− 1·0	115	0	5	0·74	+0·04	*	*	*	*
	York	70	51	67·6	53·1	59·9	+ 0·3	125	0	6	1·63	+1·01				
	Spurn Head	70	52	64·7	54·9	59·5	− 0·6	123	0	7	1·43	+1·01	*	*	*	*
3. ENGLAND, E.	Hillington M	72	49	66·9	52·8	59·4	− 1·5	122	0	5	0·84	+0·15	23·3	−19·7	22	−17
	Yarmouth	70	49	65·4	54·3	59·5	− 1·5	123	0	7	2·03	+1·35	*	*	*	*
	Geldeston	72	47	68·6	51·6	59·6	− 1·3	123	0	6	0·58	+0·08	35·1	−10·5	33	−10
	Cambridge	72	48	68·4	53·1	60·3	− 1·5	128	0	5	1·08	+0·56	41·1	− 1·6	39	− 1
	Rothamsted	69	48	67·0	53·0	59·6	− 0·8	123	0	5	0·94	+0·34	44·3	?	42	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	73	40	67·7	50·4	58·5	− 1·6	116	0	7	0·67	+0·08	*	*	*	*
	Loughborough	71	49	68·1	53·9	60·6	− 0·7	130	0	6	1·02	+0·45	*	*	*	*
	Stamford (Ketton Hall)	71	47	68·6	53·9	60·8	− 0·5	132	0	5	0·69	+0·19	*	*	*	*
	Cheadle M	70	47	63·4	51·9	57·3	− 0·6	107	0	6	0·72	−0·02	*	*	*	*
	Churchstoke M															
	Hereford M	71	46	67·9	53·0	60·0	− 0·4	126	0	4	0·46	−0·11	*	*	*	*
	Cirencester	67	43	66·3	52·4	58·9	− 0·5	118	0	6	1·61	+0·86	47·4	+ 6·8	45	+ 6
	Oxford	68	46	67·1	53·6	60·0	− 1·1	126	0	3	0·48	−0·12	48·0	+ 5·2	45	+ 5
5. ENGLAND, S.	London	72	48	69·1	54·0	61·1	− 1·4	134	0	5	0·95	+0·43	36·7†	− 2·5†	35†	− 2†
	North Foreland	70	51	67·3	54·9	60·7	− 0·9	131	0	6	0·69	?	*	*	*	*
	Strathfield Turgiss M	70	45	69·0	52·9	60·5	− 0·9	130	0	5	0·83	+0·31	*	*	*	*
	Dungeness	74	48	68·1	55·6	61·5	− 0·6	137	0	6	1·04	+0·57	*	*	*	*
	Hastings (St. Leonards)	70	50	67·3	53·2	59·8	− 2·4	125	0	5	0·41	−0·14	44·2	− 4·6	42	− 4
	Southampton	73	49	70·6	54·5	62·1	− 0·2	141	0	4	0·53	−0·12	45·4	− 1·6	43	− 2
	Hurst Castle	72	51	69·7	57·1	63·0	+ 0·9	147	0	2	0·03	−0·46	*	*	*	*
	Stowell M	67	47	65·2	53·4	59·0	− 0·9	119	0	5	0·73	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	63	47	60·7	50·3	55·2	− 1·7	92	0	6	0·69	−0·53	*	*	*	*
	Glasgow	65	47	62·7	50·7	56·3	− 0·9	100	0	4	0·69	−0·17	41·4	+12·8	38	+12
	Ardrossan	65	50	62·9	52·3	57·3	− 0·9	107	0	3	0·49	−0·29	*	*	*	*
	Glenlee S	68	42	64·2	48·1	55·7	− 1·1	96	0	4	1·72	+0·64	*	*	*	*
	Douglas (Isle of Man)	67	49	63·1	52·8	57·6	+ 0·2	109	0	4	0·75	−0·05	54·1	+13·8	50	+13
7. ENGLAND, N.W.	Stonyhurst	66	49	62·5	52·8	57·4	− 1·4	108	0	5	2·90	+1·81	37·6	+ 2·9	34	+ 2
	Blackpool M															
	Manchester	67	49	65·3	52·3	58·4	− 0·3	115	0	5	1·08	+0·16	27·8†	?	26†	?
	Liverpool Obsy. (Bidston)	67	54	64·3	55·0	59·4	− 0·5	122	0	6	0·91	+0·21	*	*	*	*
	Llandudno M	68	54	64·3	56·0	59·9	− 0·5	125	0	2	0·30	−0·35	47·9	+12·0	45	+10
	Holyhead	67	53	64·7	55·0	59·6	+ 0·1	123	0	5	0·42	−0·20	*	*	*	*
8. ENGLAND, S.W.	Llandovery	69	45	66·7	53·1	59·5	+ 0·2	123	0	5	1·31	+0·29	*	*	*	*
	Pembroke	64	54	63·0	55·9	59·2	+ 0·1	120	0	4	0·68	+0·06	48·6	+ 3·6	46	+ 3
	Bristol (Montpelier)	73	51	68·6	56·2	62·0	+ 1·7	140	0	3	1·38	?				
	Arlington (N. Devon)	65	48	63·3	53·0	57·8	− 0·8	111	0	4	1·28	+0·13	*	*	*	*
	Cullompton M	68	46	67·1	53·7	60·0	+ 0·5	126	0	3	0·57	−0·09	48·5	+ 8·8	46	+ 7
	Falmouth	68	54	65·0	56·0	60·2	0·0	127	0	5	0·51	−0·34	64·3	+18·5	61	+15
	Plymouth	69	52	66·0	55·5	60·4	− 1·1	129	0	6	0·84	+0·14	50·7	+ 7·8	48	+ 5
	Prawle Point	69	53	65·1	55·4	60·0	+ 0·3	126	0	2	1·07	+0·53	*	*	*	*
9. IRELAND, N.	Malin Head	63	50	59·6	53·0	56·0	− 1·8	98	0	6	0·89	?	*	*	*	*
	Londonderry	?	49	?	52·0	?	?	?	0	7	1·23	+0·35	*	*	*	*
	Edenfel (Omagh)	64	41	61·6	49·6	55·3	− 2·0	93	0	6	1·67	+0·86	*	*	*	*
	Belmullet	63	51	62·0	54·6	58·1	− 0·6	113	0	6	1·02	?	*	*	*	*
	Markree Castle	66	49	62·8	51·6	56·9	+ 0·1	104	0	7	1·44	+0·70	36·7	+ 8·0	34	+ 6
	Brookeborough	66	48	63·4	51·2	56·9	− 0·4	104	0	6	1·46	+0·56	*	*	*	*
	Armagh	67	49	64·5	50·9	57·3	− 0·5	107	0	7	1·33	+0·59	35·8	+ 8·7	33	+ 8
	Donaghadee	70	41	64·3	53·3	58·5	+ 1·4	116	0	4	1·03	+0·28	*	*	*	*
	Edgeworthstown	67	49	63·8	50·3	56·7	− 0·8	103	0	6	0·86	+0·01	*	*	*	*
10. IRELAND, S.	Dublin	71	52	67·2	54·4	60·4	+ 0·7	129	0	6	0·83	+0·23	50·7	+15·0	47	+12
	Parsonstown	67	48	65·4	53·3	59·0	+ 0·2	119	0	6	0·77	+0·03	29·1	− 3·4	27	− 2
	Kilkenny	70	49	66·4	53·4	59·5	+ 0·8	123	0	5	0·65	−0·01	*	*	*	*
	Waterford	72	50	70·0	53·4	61·2	+ 1·7	134	0	4	0·63	−0·10	*	*	*	*
	Roche's Point	69	52	66·4	55·0	60·4	+ 0·3	129	0	2	0·70	−0·08	*	*	*	*
	Valencia	65	52	64·1	56·1	59·9	+ 0·9	125	0	7	1·10	+0·12	37·3	+ 2·3	35	+ 1
	Killarney	67	51	65·1	54·4	59·4	+ 0·6	122	0	7	1·04	?	*	*	*	*
	Foynes	66	52	64·6	55·4	59·7	+ 1·3	124	0	7	1·56	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	69	56	65·3	56·7	60·7	+ 0·1	131	0	5	0·71	+0·13	*	*	*	*
	Jersey	73	56	68·7	58·7	63·4	+ 0·6	150	0	3	0·32	−0·18	74·7	+19·9	72	+19

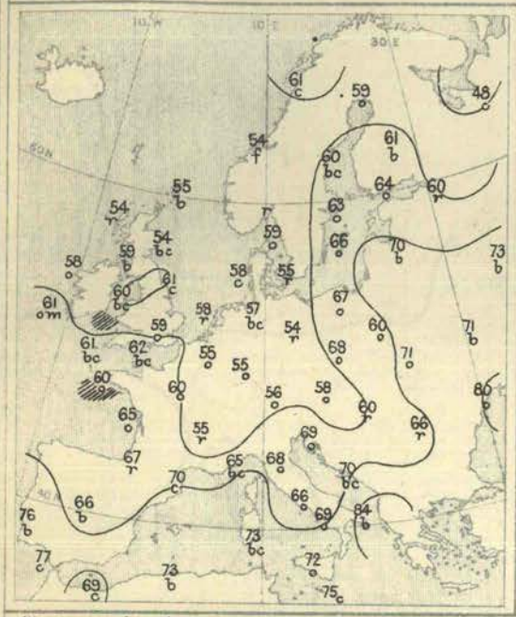
Stations marked M are in connection with the Royal Meteorological Society, and those marked S with the Scottish Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row) at the Kew Observatory, and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

Sunday, 30th July.

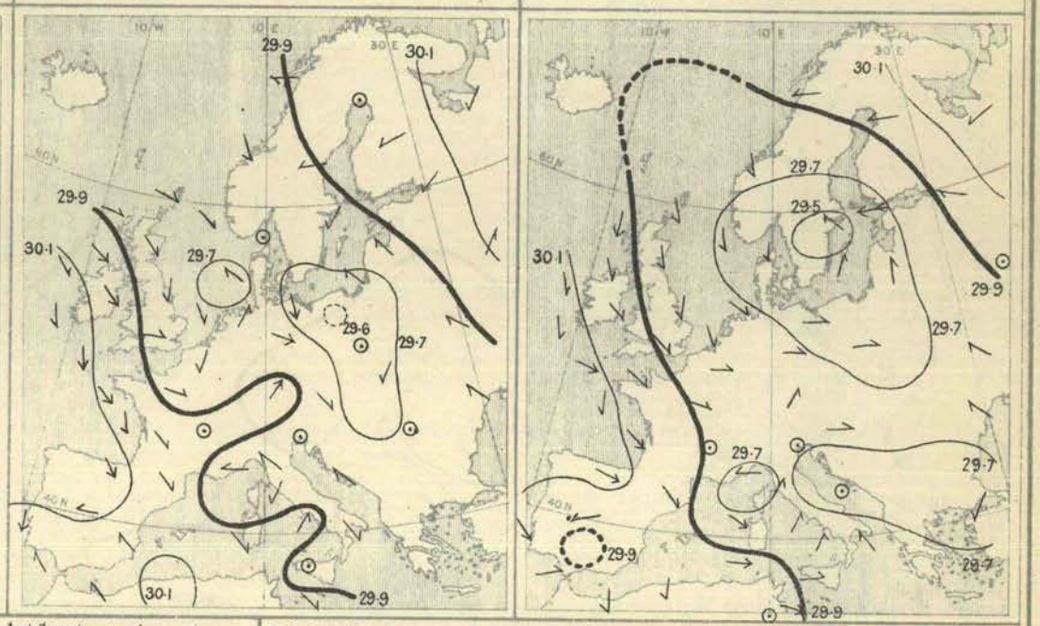
Temperature and Weather. 8 a.m.



Weather cloudy and showery over the United Kingdom generally, but fine at some of our extreme southern stations. Fine and bright over the greater part of southern and eastern Europe, dull in most other parts of the Continent, rainy at several of the French, German, and Austrian stations, as well as at Faerder, St. Petersburg, and the Helder. Rain falling during day in most parts of Europe—heavily at several stations, thunder and lightning over the east and south-east of England, and in France.

Temperature changed irregularly, fallen in most places. Morning readings highest, 84° at Brindisi, 80° at Odessa, 78° at Barcelona, and 77° at San Fernando and Sfax; above 70° over the central and southern parts of Russia. Lowest, (1) 48° at Archangel, and 54° at Christiansund, Stornoway, Wick, and Aberdeen; (2) 54° at Berlin, and 55° at Brussels, Münster, Prague, and Lyons; below 60° in most parts of north-western and central Europe. Remaining below 60° all day in the north, but rising to between 65° and 70° over the central and southern parts of our Islands. Exceeding 77° in the south of France, and reaching 80° at Perpignan, 86° to 90° over the southern parts of Italy, and 88° at Lisbon.

Barometer and Wind. 8 a.m. and 6 p.m.

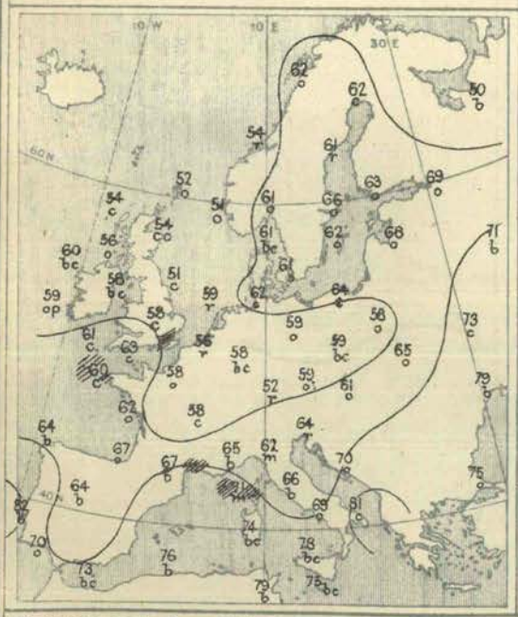


Wind (1) light to fresh from the North-Westward over our Islands, the west of Norway, and the greater part of France, South-Westerly or Southerly in western Germany; (2) South-Easterly at Fanö. Light from the South-Eastward over the south of Russia, and from the Eastward or North-Eastward in Sweden and the north of Russia. North-Westerly in eastern Germany and Austria. Variable in Italy and Algeria, chiefly Easterly in Spain. No important change occurring over western Europe during day.

Barometer highest, 30·1 ins. to 30·2 ins. in an anticyclone extending from the Atlantic over the west and south of Ireland, the Bay of Biscay, and the greater part of the Spanish Peninsula, as well as another area lying over northern and central Russia. Lowest, 29·7 ins. and less in a small depression lying over the southern parts of the North Sea, and also in a larger system covering Poland, eastern Germany, and Galicia. Another depression forming later over the south of Sweden; barometer very unsteady over the United Kingdom and France, falling over Russia.

Monday 31st July.

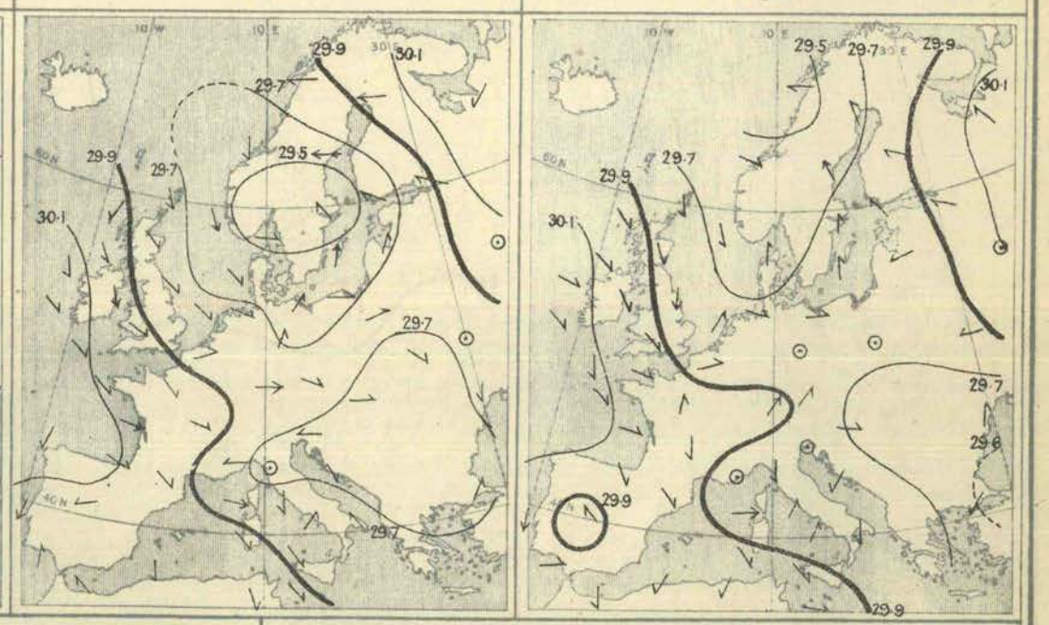
Temperature and Weather. 8 a.m.



Weather in morning fine and bright over Russia on the one hand, and over the Mediterranean and south-western Europe on the other, cloudy or changeable elsewhere, with rain in several Yarmouth. Showers later, except in the west of our Islands, considerable falls at Christiansund and Haparanda, heavy at Wiesbaden and Cracow, and very heavy at Warsaw; thunderstorms very prevalent over western Germany.

Temperature changing little and irregularly. Highest, 81° at Brindisi, 79° at Sfax and Odessa, and above 70° all over south-eastern Europe and at most of the Mediterranean stations; as high as 69° at St. Petersburg and 66° at Stockholm. Lowest, 52° at Sumburgh Head, 53° at Wick, 54° at Christiansund, 55° at Shields. Rising later to 90° and more in some parts of Algeria, Spain, and Portugal, to between 80° and 89° over Italy and at St. Petersburg, to 70° and more over France, and just touching 70° at Hurst Castle. Failing to reach 70° over Germany or the British Isles as a whole.

Barometer and Wind. 8 a.m. and 6 p.m.



Wind Easterly over northern Europe (strong to a gale over the Gulf of Bothnia), North-Westerly, moderate to fresh, over our Islands, the Channel, and the North Sea; Westerly to North-Westerly, light, over France, North-Easterly over Spain. Rather strong and mainly North-Westerly over the Mediterranean, very light and (anticyclonic) South-Easterly over Russia. Light South-Easterly over the Baltic later, very little change elsewhere.

Barometer highest, (1) 30·1 ins. and more to 30·0 ins. over the Atlantic and adjacent shores of Europe and the British Isles; (2) 30·3 ins. to 30·0 ins. over the north-east and north of Russia. Lowest, 29·5 ins. and less in a depression over Scandinavia, and about the same value in another over Austria and south-eastern Europe; about 29·7 ins. over the north-eastern part of the Mediterranean. Rising over western and north-western Europe later. Scandinavian depression moving northwards, the other moving south-eastwards.

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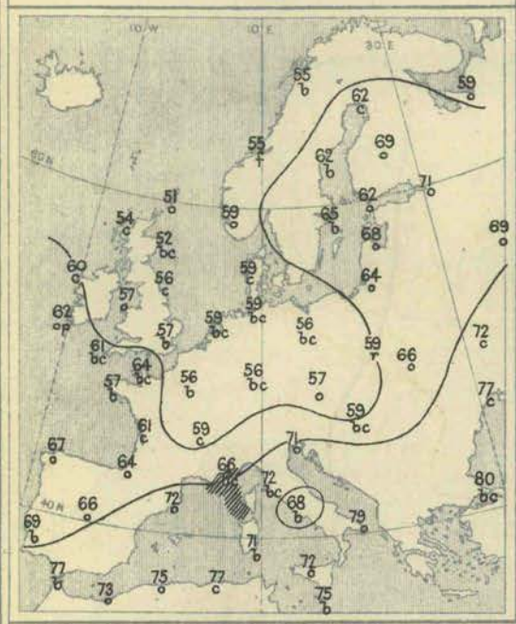
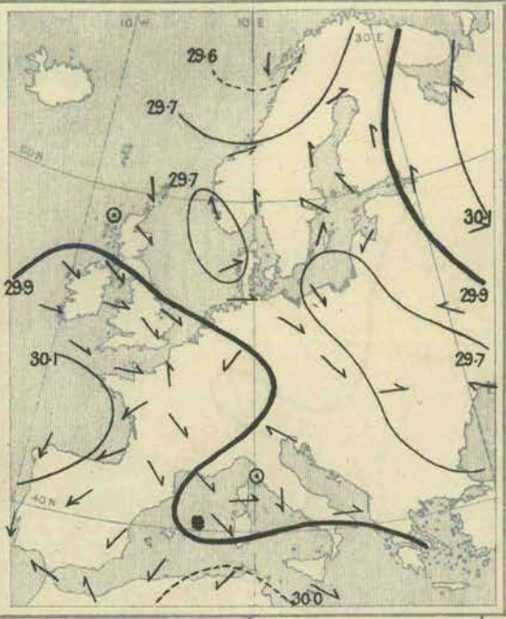
Tuesday, 1st August.

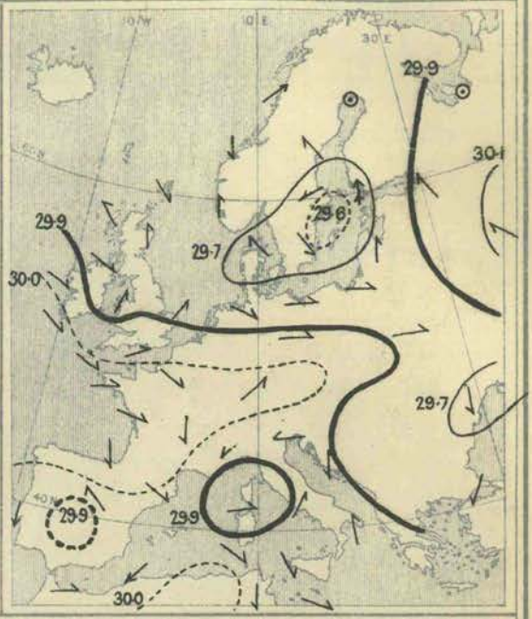
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over Algeria, the Mediterranean, and greater part of France, together with the southern parts of England; cloudy or overcast elsewhere and unsettled; showery in the extreme west and over some parts of central Europe. Rain later, more or less, over nearly the whole of the British Islands, the north-east of France, Germany, and Sweden—amounts exceeding 0·7 in. at Dungeness and Prawle Point, 0·6 in. at Utrecht, 0·5 in. at Wisby, and 0·3 in. at Paris and Lemberg.

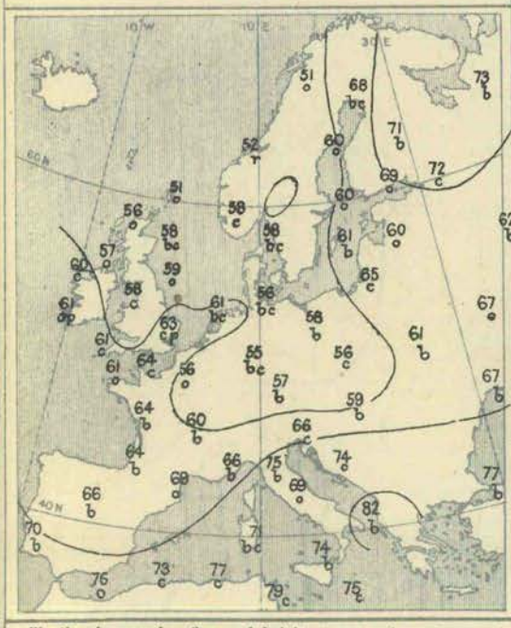
Temperature changing very little. Morning readings highest, 79° to 70° over the Mediterranean (except on its northern shores), as well as on the south coast of Russia, and exceeding 60° over the remainder of Russia, with the Baltic, Finland, and Sweden. Lowest, 51° at Sumburgh Head, 52° at Aberdeen, 53° at Malin Head and Nairn, 54° at Christiansund and Münster. Rising later to 100° and more at Laghouat, to 80° and more over Italy and some southern French stations, and to 70° at Paris; failing to reach 70° at any of our own stations—where the highest values recorded were 69° at Hurst Castle, and 68° at Dungeness and in London.

Wind was (1) Westerly to North-Westerly over our Islands, the Netherlands, and the Channel, North-Easterly to Northerly over the south-west of France and in Spain; (2) Easterly to South-Easterly over Russia, Finland, and south of Sweden. Very variable elsewhere, faint circulation being prevalent over northern, central, and southern Europe. New but small cyclonic circulation advancing over our north-western districts later.

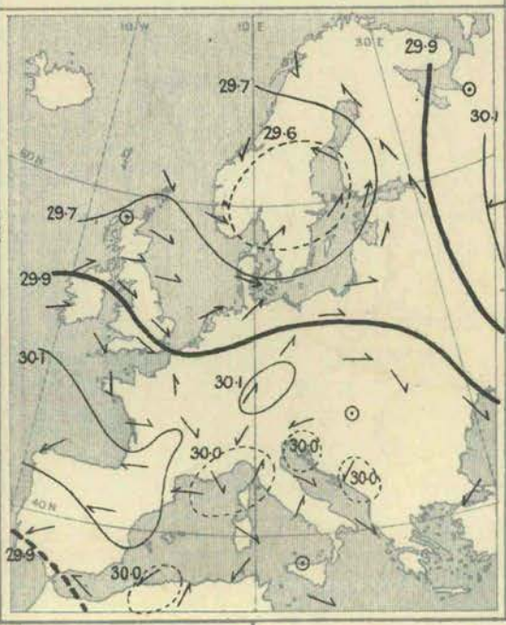
Barometer highest, 30·1 ins. to 30·0 ins. and more (1) over the Bay of Biscay, Spain, France, and (2) over the north and north-east of Russia. Lowest, (1) 29·6 ins. and less over Finmark and the north of Sweden, and below 29·7 ins. in other depressions (1) over the eastern side of the North Sea, and (2) over Poland, Hungary, and the south-west and south of Russia; below 29·9 ins. over the north-eastern parts of the Mediterranean also. New disturbance reaching our north-west coasts later, and another forming over the Baltic.

Wednesday, 2nd August.

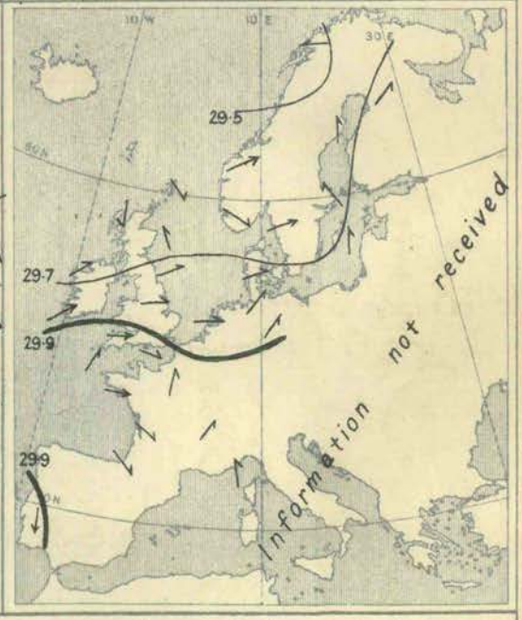
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over south-western and south-eastern Europe, as well as the northern parts of Russia; changeable elsewhere, with showers in a few places, but a showery tendency in many. Rain falling later over the northern and western parts of the United Kingdom, as well as in the Netherlands and north Germany, and slight showers on our extreme east coasts; amounts considerable at our extreme north-western stations, and a heavy fall at Christiansund. [Evening information from eastern, southern, and south-western Europe not yet received.]

Temperature fallen fast in the south of Russia, not changed materially elsewhere. Morning readings highest, 82° at Brindisi, and exceeding 70° over the southern parts of the Mediterranean, at the coast stations of south-eastern Europe, and also over Finland and the north of Russia. Below 60° over central Europe, the north-western and northern parts of the British Islands and Norway. Lowest, 51° at Bodö and Sumburgh Head, 52° at Christiansund, 55° at Nairn, Brussels, and Wiesbaden. Touching 88° at Lisbon, 86° at Perpignan, 80° at Lyons later, and slightly exceeding 70° over the southern parts of England.

Wind North-Westerly to Westerly over the British Islands, the Channel and west of France, and blowing freshly at some of the Channel stations, Westerly to South-Westerly over north Germany (fresh in places), Southerly to South-Easterly over Finland, Easterly to Northerly, light, over the northern parts of Scandinavia. Very variable over southern Europe and the Mediterranean, North-Easterly over Spain. Backing to South-West and South on our western coasts later, and freshening.

Barometer highest, 30·1 ins. and more to 30·0 ins. (1) over central Russia, (2) over the Bay of Biscay, Spain, and the southern countries of Europe generally. Lowest, 29·6 ins. and less in a large shallow depression over Scandinavia, and below 29·8 ins. in a long "V" stretching from the Baltic Provinces across western and south-western Russia to the Black Sea. Rather below 30·0 ins. over the northern parts of the Mediterranean and Italy, with the Adriatic. Falling on our western and north-western coasts later, and fall spreading eastwards.

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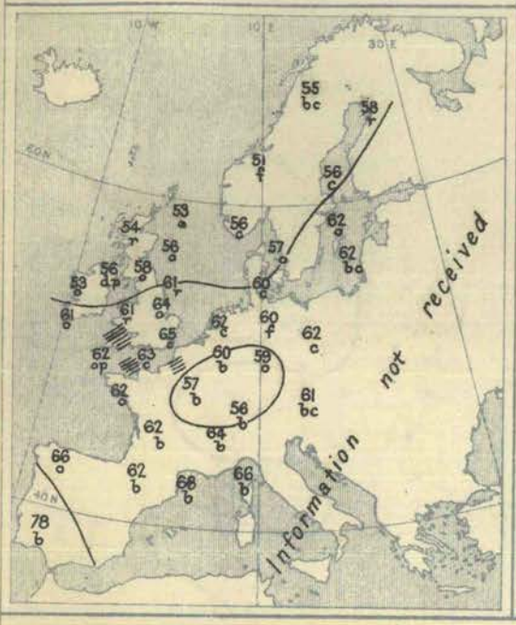
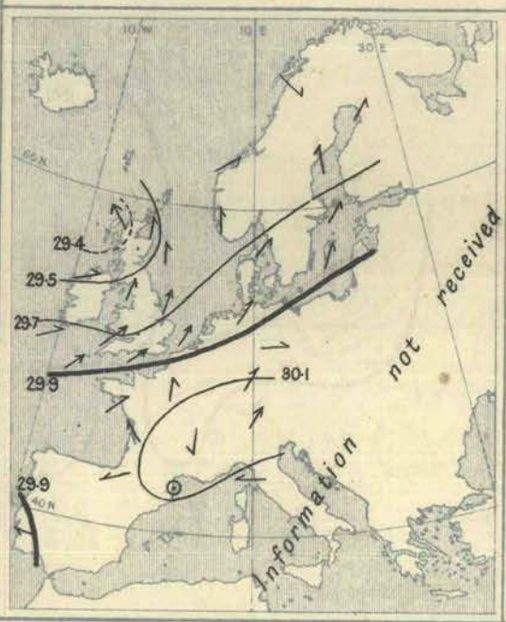
Thursday, 3rd August.

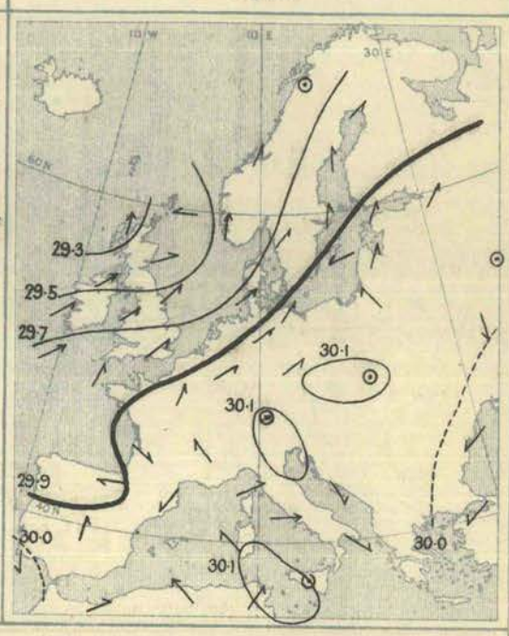
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over Spain, the Mediterranean, and greater part of France, fair over Germany, very unsettled over the British Islands, with rain in many places. Rain in all parts of our Islands later, thunder at Loughborough—heavy fall at Sumburgh Head, and considerable at several other stations; local showers in a few parts of France, Germany, and Scandinavia; thunder at Biarritz.

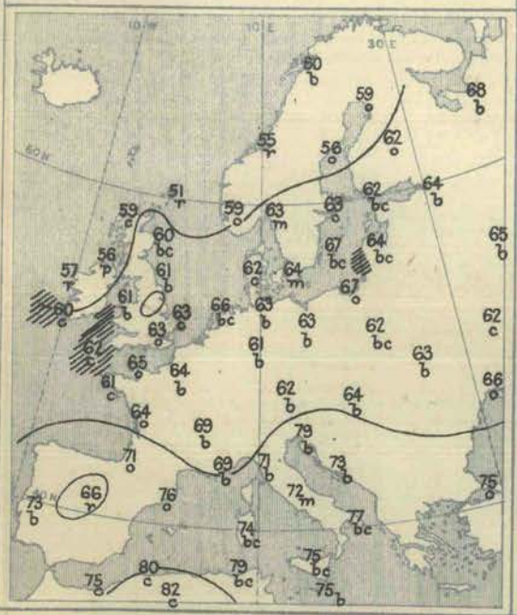
Temperature rising a little. Morning readings exceeding 70° at Lisbon, and exceeding 60° in the south of France, in Germany, and several parts of our Islands. Lowest, 51° at Christiansund, 53° at Sumburgh Head, 54° in the north of Scotland, 56° at Belfort, 57° at Paris. Rising during day to between 100° and 104° over central Algeria, to 90° and more in some parts of Spain, to 80° and more over the southern parts of Italy, and to a little more than 70° in some parts of England—only just touching 60° at Wick.

Wind moderate Westerly to South-Westerly in Ireland, fresh to strong, South-Westerly over the Channel and England, moderate Southerly and South-Easterly in Scotland. Light South-Westerly in the north of France, Westerly at Berlin, Southerly on the Swedish coasts, variable over Norway. Blowing a moderate gale from South-West in the Solent and over the North Sea later, and backing and freshening in Ireland. Light and anticyclonic breezes over eastern and southern Europe.

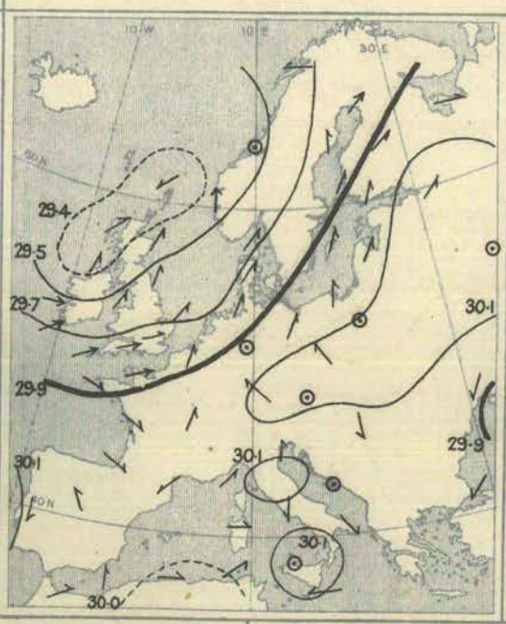
Barometer highest, 30·1 ins. and more to 29·9 ins. over Spain, France, and central Europe. Lowest, 29·4 ins. and less in a depression off our north-western coasts; gradients somewhat steep over England and the Channel. Depression in north-west moving north-eastwards later; continental high-pressure system apparently moving south-eastwards.

Friday, 4th August.

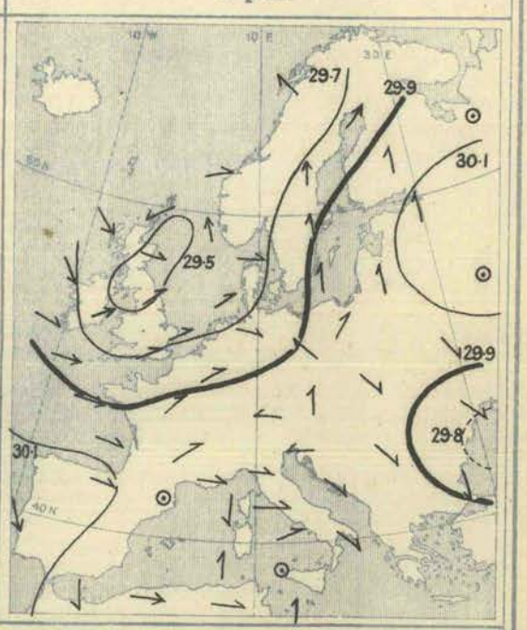
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over Russia, central, southern, and south-western Europe, as well as at some English stations, changeable and unsettled over our Islands and the North Sea as a whole, with rain at several western and northern stations. Showers later in nearly all parts of western and northern Europe. Thunderstorms and hail in several places, rainfall exceeding 0·7 in. at Yarmouth and in London, and amounting to 0·8 in. at Faerder, 0·9 in. at Besançon, and 1·1 ins. at the Scaw.

Temperature changing somewhat irregularly. Morning readings ranging between 70° and 80° in the extreme south-east and south, and exceeding 60° over the whole of Russia, central and western Europe. Lowest, 51° at Sumburgh Head, 55° at Christiansund, 56° at Malin Head and Parsonstown. Rising later to between 69° and 72° over several parts of England, to 78° at Brussels, 82° at Paris, and 84° at Lisbon, 85° and more in the south of Italy and at Lyons, 91° at Aumale, and 104° at Laghouat (Algeria).

Wind Westerly over the western parts of our Islands and the Bay of Biscay, South-Westerly in the east and over Germany, Southerly over northern Europe; very variable in the north-east of Scotland. Very light and variable over eastern, southern, and south-western Europe also. Blowing strongly in many parts of our Islands, and freshly on the eastern shores of the North Sea. Veering to North-West on our north-west coasts later, becoming very strong and squally in those regions, and blowing a fresh gale from West at Münster.

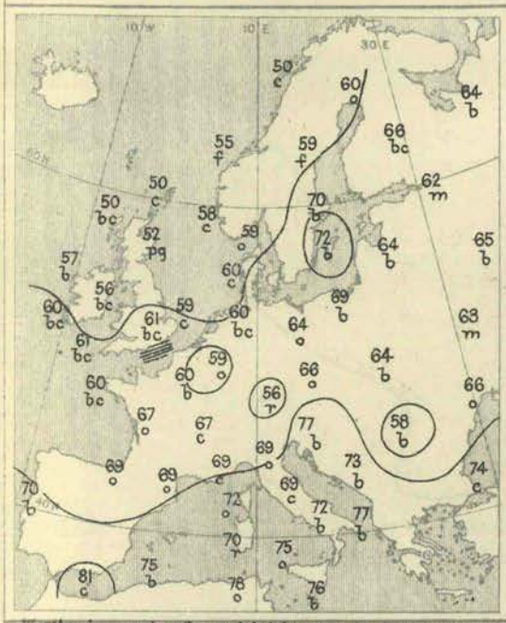
Barometer highest, 30·1 ins. and more to 30·0 ins. over the eastern, southern, and south-western countries generally. Lowest, 29·4 ins. and less in a complex depression off our extreme north-western and northern coasts, and below 29·9 ins. in a shallow system over the Black Sea. Rising very quickly in the west and north of the United Kingdom later, and less quickly over the Bay of Biscay and Spain, but falling rather decidedly over the more eastern countries; depression over our northern districts moving south-eastwards.

Judd & Co Ltd, lith. 63, Carter Lane.

Saturday, 5th August.

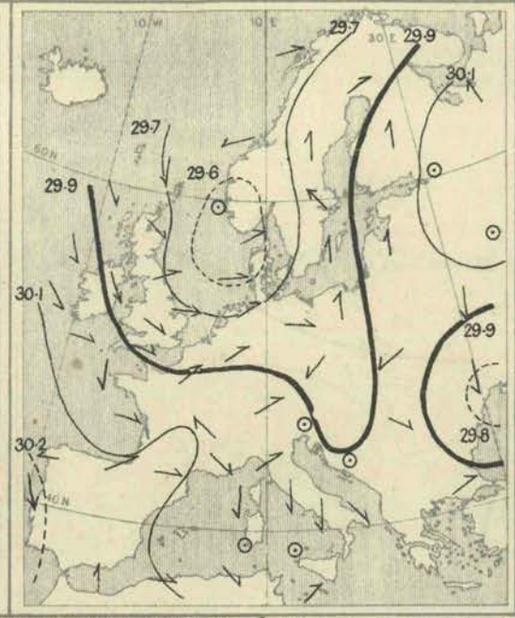
Temperature and Weather.

8 a.m.

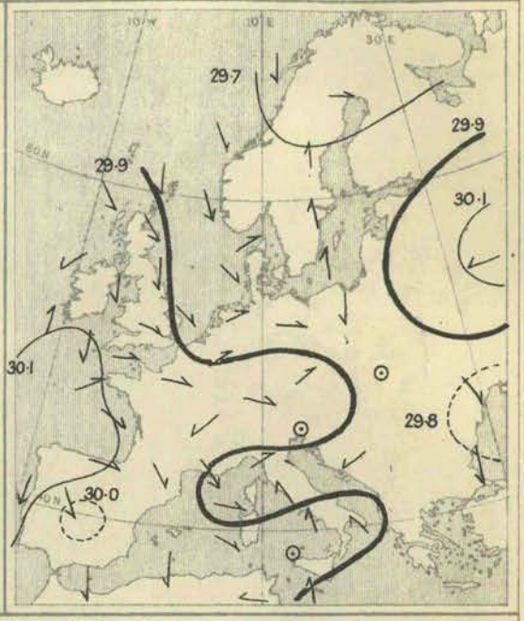


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning fine and bright over the Baltic, Russia, eastern Germany, Austria, the Mediterranean, and in many parts of western Europe; changeable and unsettled over the British Isles and North Sea, though temporarily clear at many stations—showery and squally at several of our north-western, north-eastern, and eastern stations. Rain falling in many parts of the British Isles, western and northern Europe later, and heavy thunderstorms occurring along our north-eastern and eastern coasts and in Holland. Subsequently becoming rainy in Ireland also.

Temperature falling in Scotland, rising over the Baltic and central Europe. Morning readings highest, 81° at Oran, and exceeding 70° at most of the Mediterranean and Adriatic stations; exceeding 60° in most other places. Lowest, 50° at Bodö, Sumburgh Head, and Stornoway, 52° at Aberdeen, 54° at Malin Head, 55° at Christiansund, 56° at Donaghadee and Parsonstown. Rising later to 90° and more over Algeria, to 80° and more over parts of Spain, the south of France, and Italy, and to 70° and more over Germany, France, and the southern parts of England. Succeeding night cold (42° to 45°) over England.

Wind moderate to fresh from between North and West over our Islands, moderate to light from West and South-West over France, from South-West and South over Germany, from South over the Baltic, Finland, and Sweden; light North-Easterly at Christiansund. Moderating still more in our Islands later, and shifting to South again at Valencia, but becoming North-Westerly on the eastern shores of the North Sea, and blowing strongly at Skudesnaes.

Barometer highest, 30·2 ins., and more to 30·0 ins. (1) over Spain, the Bay of Biscay, the greater part of France, and south-west of our Islands; (2) over the northern half of Russia. Lowest, 29·6 ins., and less in a depression over the south of Norway and eastern side of the North Sea, and about 29·9 ins. over the Gulf of Genoa. Rising over western Europe later as the North Sea depression moved eastward, but inclined to fall again in the west of Ireland.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force is indicated thus: ⟿ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze: and ⊙ = a calm. In the left-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Germany, Sweden, and Norway, and 7 a.m. in France, Algeria, Italy, Austria, and Russia; that for 6 p.m. is prepared from observations made at 6 p.m. in the British Islands and France, 7 p.m. in Algeria, 8 p.m. in Sweden and Norway, Germany, and Austria, and 9 p.m. in Russia, Belgium, and Italy. The time indicated in each case is the standard time for each country.

GENERAL NOTES.

During the first four days of this week pressure was high both over south-western and north-eastern Europe, while depressions of no great depth were found over the North Sea, Scandinavia, and the central and south-eastern countries, so that in all the last-named regions the weather was changeable—sometimes very rainy and thundery, and the temperature was rather below its normal value.

On Wednesday and Thursday, however, pressure recovered over the Continent, and became comparatively uniform at a little above its normal value, but Friday brought a new disturbance to the north-western and northern coasts of Great Britain, and this spread south-easterly over the North Sea, so that cool North-Westerly winds, thunderstorms, and heavy rains again became prevalent over the eastern parts of Great Britain, and unsettled weather over the Baltic and central Europe.

At the close of the week some improvement was in progress over Great Britain.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 182.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	STATIONS	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	25·1	?	23	?	EASTBOURNE	44·1	?	42	?
OSWALDKIRK (Yorkshire)	41·1	?	38	?	TENBY	45·3*	?	43*	?
WORKSOP	36·3	+ 0·3	34	+ 1	NEWQUAY	57·5	?	55	?
THURCASTON (Leicestershire)	41·8	+ 4·7	39	+ 4	TORQUAY	53·4*	?	51*	?
MARGATE	49·6	?	47	?	ARLEY COTTAGE (County Cavan)	43·8	?	40	?
WESTBOURNE (Sussex)	41·7*	?	39*	?	GUERNSEY	74·7*	?	72*	?
BRIGHTON	48·5	?	46	?					

* The values at Westbourne, Tenby, Torquay and Guernsey are obtained by Jordan's Photographic Recorder.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; R. H. SCOTT, F.R.S., SECRETARY.

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VOL. X. No. 32.] *Third Series.* WEEK ENDING SATURDAY, 12TH AUGUST, 1893. [*Price 6d.* *Annual Subscription, post paid, £1 10s. 0d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871-90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the twenty-five years 1866-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the ten years 1881-90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

	DISTRICTS. (See p. 188.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 1st, 1893. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	81	35	65·9	52·2	58·6	4 above.	116	+34	0	0	1614	+478	485	- 57
	1. SCOTLAND, EAST	80	35	63·5	53·5	60·5	4 above.	130	+26	0	0	1783	+288	548	- 21
	2. ENGLAND, N.E.	81	43	71·1	55·9	63·0	4 above.	147	+35	0	0	1889	+320	436	- 62
	3. ENGLAND, EAST	85	45	74·3	56·6	65·1	4 above.	162	+38	0	0	2251	+410	524	- 37
	4. MIDLAND COUNTIES	86	39	77·0	54·9	65·3	6 above.	163	+44	0	0	2374*	+537	505	- 47
	5. ENGLAND, SOUTH	86	42	74·3	57·9	65·6	4 above.	165	+33	0	0	2443	+458	373	- 43
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	81	37	68·9	55·0	61·5	4 above.	137	+35	0	0	1957	+426	354	- 63
	7. ENGLAND, N.W.	83	44	72·9	57·7	64·9	6 above.	160	+47	0	0	2220	+573	323	- 91
	8. ENGLAND, S.W.	86	40	71·4	58·2	64·4	5 above.	157	+38	0	0	2441	+602	246	- 70
	9. IRELAND, NORTH	80	43	70·1	56·3	62·8	5 above.	146	+41	0	0	2129*	+489	258	-104
	10. IRELAND, SOUTH	78	53	71·1	59·1	64·8	6 above.	160	+47	0	0	2410	+536	178	-100
	—CHANNEL ISLANDS	84	50	73·2	59·7	36·1	4 above.	169	+37	0	0	2705	+684	70	- 52

Rainfall. Bright Sunshine.

	DISTRICTS. (See p 188.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the mean for the Week.	From Jan. 1st, 1893. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 1st, 1893. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of ins.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	5	6	3 less.	136	-10	23·6	- 3·6	21	+ 2	20	+ 1	751	- 84	25	- 3
	1. SCOTLAND, EAST	4	3	4 less.	113	- 5	14·6	- 3·4	30	- 3	28	- 5	949	- 23	32	0
	2. ENGLAND, N.E.	4	4	2 less.	98	-11	12·5	- 2·4	40	+ 10	38	+ 7	1066	+177	35	+ 6
	3. ENGLAND, EAST	4	8	2 more.	97	- 9	12·0	- 2·8	52	+ 11	50	+ 7	1283	+217	43	+ 7
	4. MIDLAND COUNTIES	4	5	1 less.	96	-10	12·1	- 4·3	50	+ 12	48	+11	1204	+257	41	+ 9
	5. ENGLAND, SOUTH	3	1	4 less.	90	-12	11·9	- 3·5	58	+ 15	56	+13	1327	+304	45	+ 10
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	5	10	1 more.	111	-15	20·8	- 7·3	25	- 10	23	-10	1079	+117	36	+ 4
	7. ENGLAND, N.W.	4	8	0(average)	101	-13	15·6	- 3·3	37	+ 1	36	+ 1	1087	+136	37	+ 5
	8. ENGLAND, S.W.	4	5	3 less.	94	-23	17·9	- 4·3	37	- 10	35	- 8	1399	+283	48	+ 10
	9. IRELAND, NORTH	5	15	7 more.	120	-15	18·8	- 1·9	35	+ 7	33	+ 8	943	+ 60	32	+ 2
	10. IRELAND, SOUTH	5	14	6 more.	108	-16	18·0	- 4·5	34	- 2	32	3	1034	+ 20	35	+ 1
	—CHANNEL ISLANDS	3	3	2 less.	99	-25	13·5	- 4·3	73	+ 18	72	+18	1646	+339	56	+ 11

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks

Weather was almost continuously fine on our extreme southern and south-eastern coasts, but in all other parts of the Kingdom it was less settled—showers falling rather frequently over England, and a great deal of rain in the extreme western and northern districts. Sharp thunderstorms occurred at nearly all stations late on the 9th or early on the 10th, those experienced in the north of Ireland being exceptionally severe. During the latter part of the week the atmosphere was very close and oppressive.

Temperature was above the mean in all districts, the excess ranging from 6° in the Midland Counties, England N.W., and Ireland S., to 4° in most other parts of the Kingdom. The highest of the maxima were recorded either on the 8th or 9th, when they ranged from 85° to 86° in most parts of England, to 80° in Scotland E. and Ireland N., and to 78° in Ireland S. The lowest of the minima were registered during the early morning of the 6th, when the thermometer fell to between 35° and 37° in Scotland, to 39° in the Midland Counties, and to between 40° and 43° in most other districts. In the Channel Islands, however, the lowest reading was 50° and in Ireland S. 53°. During the greater part of the week the nightly minima were high, those recorded during the last few days being 60° and upwards.

Rainfall exceeded the mean in England E., Scotland W., and both the Irish districts, and just equalled it in England N.W., in all other districts there was a deficit. The rainfall experienced during the thunderstorms was very heavy in places, notably at some stations in the north of Ireland and England and at Cambridge—the latter fall seems to have been very local.

Bright Sunshine exceeded the mean in nearly all districts, the percentage of the possible duration ranging from 25 to 28 in Scotland, from 32 to 33 in Ireland, and from 35 to 56 over England. In the Channel Islands the percentage was as high as 72.

Barometer and Wind.—The distribution of pressure during the earlier part of this period was mainly anticyclonic over England, and the winds light to moderate from the South-Westward and Westward. Depressions were frequently observed over our extreme western and north-western coasts, and later on, local thunderstorm disturbances passed directly over different parts of this country.

* This value has been altered owing to the receipt of further information for a preceding week.

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II.—DATA from which the SUMMARY on page 187 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.)								Rainfall.			Bright Sunshine.			
		Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°				Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	61	42	57·6	50·1	53·6	+ 0·6	81	0	6	0·87	+0·19	*	*	*	*
	Stornoway	72	40	64·6	51·9	57·9	+ 3·4	111	0	6	0·68	−0·12	29·7	+ 2·0	27	+ 1
	Wick	74	41	64·7	50·7	57·3	+ 2·4	107	0	3	0·18	−0·41	*	*	*	*
	Lairg Ⓢ	70	35	66·7	51·9	58·9	+ 4·0	118	0	5	0·72	+0·01	*	*	*	*
	Glencarron Ⓢ	77	37	69·2	52·7	60·5	+ 6·1	130	0	4	0·39	−1·10	*	*	*	*
	Fort Augustus Ⓢ	74	37	69·1	53·9	61·0	+ 4·7	133	0	6	0·34	−0·35	15·5	?	14	?
	Fort William Ⓢ	81	39	69·2	54·3	61·3	+ 4·8	135	0	5	0·71	−0·59	19·0	?	18	?
1. SCOTLAND, E.	Nairn	75	38	70·1	52·6	60·8	+ 3·9	132	0	3	0·15	−0·49	*	*	*	*
	Aberdeen	72	41	66·3	52·9	59·2	+ 2·5	120	0	4	0·12	−0·58	31·0	− 4·8	29	− 5
	Braemar Ⓢ	75	35	64·2	51·4	57·4	+ 3·1	108	0	6	0·28	−0·52	28·3†	?†	26†	?†
	Ochtertyre Ⓢ	80	47	68·6	53·4	60·5	+ 3·8	130	0	5	0·51	−0·29	*	*	*	*
	Leith	77	44	70·6	53·6	61·6	+ 3·1	137	0	5	0·58	+0·01	*	*	*	*
	Marchmont Ⓢ	77	54	71·1	57·0	63·6	+ 7·1	151	0	4	0·36	−0·44	32·3	?	30	?
2. ENGLAND, N.E.	Alnwick Castle	72	52	69·0	55·7	62·0	+ 4·9	140	0	3	0·13	−0·58	*	*	*	*
	Durham	77	45	74·0	55·4	64·1	+ 5·5	155	0	4	0·40	−0·22	41·0	+ 5·3	39	+ 6
	Shields	75	48	69·0	55·3	61·7	+ 3·7	138	0	3	0·43	−0·27	*	*	*	*
	Scarborough Ⓜ	76	46	71·6	56·1	63·4	+ 4·6	150	0	3	0·18	−0·49	*	*	*	*
	York	81	43	74·4	56·0	64·7	+ 5·3	159	0	4	0·75	+0·17	42·2	+ 8·0	40	+ 7
	Spurn Head	74	50	68·3	56·9	62·3	+ 2·5	142	0	4	0·60	+0·18	*	*	*	*
3. ENGLAND, E.	Hillington Ⓜ	82	46	75·7	55·8	65·2	+ 4·7	162	0	4	0·58	−0·07	50·5	+ 9·3	48	+ 9
	Yarmouth	73	50	68·6	58·6	63·3	+ 2·5	149	0	4	0·33	−0·27	*	*	*	*
	Geldeston	81	46	74·1	56·0	64·5	+ 4·0	158	0	4	0·30	−0·15	48·2	+ 3·5	46	+ 3
	Cambridge	85	47	78·9	56·4	67·0	+ 5·6	175	0	5	2·39	+1·89	53·7	+12·4	52	+12
	Rothamsted	80	45	75·7	56·3	65·4	+ 5·1	164	0	2	0·24	−0·34	55·8	?	54	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	86	48	77·9	53·1	64·8	+ 5·2	160	0	4	0·76	+0·18	*	*	*	*
	Loughborough	85	43	79·6	54·9	66·5	+ 5·7	172	0	4	0·50	−0·08	*	*	*	*
	Stamford (Ketton Hall)	86	41	78·3	53·9	65·4	+ 4·5	164	0	4	0·76	+0·28	*	*	*	*
	Cheadle Ⓜ	81	43	74·0	55·1	64·0	+ 6·3	154	0	4	0·43	−0·34	*	*	*	*
	Churchstoke Ⓜ	82	39	74·5	54·9	64·1	+ 6·2	155	0	3	0·34	−0·31	48·1	+ 9·6	46	+ 9
	Hereford Ⓜ	85	41	78·9	55·0	66·2	+ 6·0	169	0	3	0·73	+0·18	*	*	*	*
	Cirencester	82	41	75·9	?54·7	?64·7	? + 5·6	? 159	0	3	0·30	−0·42	50·8	+10·1	49	+ 9
	Oxford	83	46	76·6	57·7	66·6	+ 5·7	172	0	3	0·11	−0·44	55·2	+13·2	53	+12
5. ENGLAND, S.	London	86	46	80·3	57·6	68·3	+ 6·9	184	0	4	0·21	−0·29	53·2†	+14·8†	51†	+14†
	North Foreland	74	55	70·4	59·0	64·3	+ 3·2	156	0	4	0·25	?	*	*	*	*
	Strathfield Turgiss Ⓜ	85	42	77·9	54·5	65·5	+ 4·3	165	0	4	0·07	−0·43	*	*	*	*
	Dungeness	74	47	71·0	59·1	64·7	+ 2·7	159	0	1	0·01	−0·46	*	*	*	*
	Hastings (St. Leonards)	81	49	73·9	57·9	65·4	+ 3·2	164	0	1	0·04	−0·51	70·2	+22·3	63	+22
	Southampton	83	46	75·4	58·9	66·7	+ 4·6	173	0	1	0·01	−0·59	49·2	+ 2·5	48	+ 2
	Hurst Castle	77	48	72·7	60·1	66·0	+ 4·0	168	0	1	0·03	−0·47	*	*	*	*
	Stowell Ⓜ	80	42	73·0	56·3	64·2	+ 4·6	155	0	4	0·13	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	80	41	68·3	54·4	60·9	+ 4·0	132	0	6	0·68	−0·52	*	*	*	*
	Glasgow	80	48	69·1	55·7	61·8	+ 4·9	139	0	5	0·88	+0·01	19·7	− 9·5	18	− 9
	Ardrossan	78	43	67·9	55·0	61·1	+ 3·0	134	0	5	1·38	+0·55	*	*	*	*
	Glenlee Ⓢ	81	37	71·4	54·4	62·4	+ 5·9	143	0	4	0·83	−0·23	*	*	*	*
	Douglas (Isle of Man)	74	41	67·9	55·7	61·4	+ 4·2	136	0	6	1·25	+0·45	29·6	− 9·7	28	− 9
7. ENGLAND, N.W.	Stonyhurst	78	44	71·5	55·6	63·1	+ 4·5	148	0	5	1·95	+0·87	41·7	+ 7·7	39	+ 7
	Blackpool Ⓜ	83	54	73·9	58·4	65·7	+ 6·1	166	0	5	1·14	+0·40	32·2	− 4·8	30	− 5
	Manchester	81	46	74·3	57·0	65·1	+ 6·6	162	0	5	0·40	−0·48	41·2†	?	39†	?
	Liverpool Obsy. (Bidston)	80	50	73·4	58·4	65·5	+ 5·7	165	0	4	0·26	−0·42	*	*	*	*
	Llandudno Ⓜ	82	47	73·6	59·4	66·1	+ 5·9	169	0	2	0·31	−0·30	34·6	− 0·9	33	− 2
	Holyhead	83	48	70·7	57·7	63·8	+ 4·3	153	0	5	0·69	+0·06	*	*	*	*
8. ENGLAND, S.W.	Llandovery	86	40	76·4	55·6	65·4	+ 6·1	164	0	4	0·95	−0·08	*	*	*	*
	Pembroke	73	56	67·6	59·6	63·4	+ 4·2	150	0	5	0·82	+0·19	35·5	−10·3	34	−10
	Bristol (Montpelier)	85	47	76·9	58·5	67·2	+ 7·0	176	0	2	0·12	?	*	*	*	*
	Arlington (N. Devon)	77	45	71·0	57·3	63·7	+ 5·3	152	0	4	1·47	+0·32	*	*	*	*
	Cullompton Ⓜ	78	43	74·1	57·0	65·0	+ 5·7	161	0	3	0·14	−0·49	35·7	− 5·3	35	− 5
	Falmouth	73	52	69·3	60·0	64·4	+ 4·2	157	0	3	0·22	−0·61	36·1	−10·2	35	−12
	Plymouth	76	49	68·8	59·0	63·6	+ 2·1	151	0	4	0·23	−0·45	35·0	− 8·3	34	−10
	Prawle Point	71	50	67·0	58·6	62·6	+ 2·9	144	0	3	0·08	−0·44	*	*	*	*
9. IRELAND, N.	Malin Head	73	49	67·4	56·4	61·6	+ 3·9	137	0	5	1·59	?	*	*	*	*
	Londonderry	80	43	73·4	55·4	63·9	+ 5·9	153	0	6	1·16	+0·28	*	*	*	*
	Edenfel (Omagh)	79	54	71·9	57·4	64·2	+ 7·2	155	0	5	2·88	+2·08	*	*	*	*
	Belmullet	77	52	69·4	57·3	63·0	+ 4·2	147	0	4	0·71	?	*	*	*	*
	Markree Castle	77	47	71·5	55·6	63·1	+ 6·4	148	0	5	1·43	+0·66	33·7	+ 4·6	32	+ 4
	Brookeborough	77	44	71·1	55·7	62·9	+ 5·9	146	0	5	2·13	+1·28	*	*	*	*
	Armagh	77	45	70·4	56·0	62·8	+ 5·2	146	0	4	1·09	+0·39	37·3	+10·5	35	+10
	Donaghadee	73	53	66·1	57·1	61·3	+ 4·3	135	0	5	1·38	+0·65	*	*	*	*
	Edgeworthstown	75	49	70·1	55·9	62·6	+ 5·3	144	0	3	0·88	+0·05	*	*	*	*
10. IRELAND, S.	Dublin	78	53	72·7	59·2	65·6	+ 6·1	165	0	4	0·46	−0·16	39·3	+ 3·1	37	+ 1
	Parsonstown	77	53	73·3	57·9	65·1	+ 6·6	162	0	4	0·67	−0·08	28·5	− 4·5	27	− 4
	Kilkenny	76	53	72·9	58·0	65·0	+ 6·5	161	0	3	0·93	+0·23	*	*	*	*
	Waterford	73	55	70·1	58·4	63·9	+ 4·3	153	0	6	2·06	+1·28	*	*	*	*
	Roche's Point	70	57	66·9	59·3	62·9	+ 3·0	146	0	6	2·41	+1·61	*	*	*	*
	Valencia	75	58	70·4	60·3	65·1	+ 6·0	162	0	6	2·29	+1·28	33·3	− 2·7	31	− 4
	Killarney	76	59	69·6	59·9	64·5	+ 5·6	158	0	5	1·39	?	*	*	*	*
	Foynes	76	56	72·9	59·6	65·9	+ 7·6	167	0	4	0·62	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	71	57	69·0	60·6	64·6	+ 3·9	158	0	4	0·59	+0·04	*	*	*	*
	Jersey	84	50	77·4	58·7	67·5	+ 4·6	179	0	1	0·01	−0·47				

Stations marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

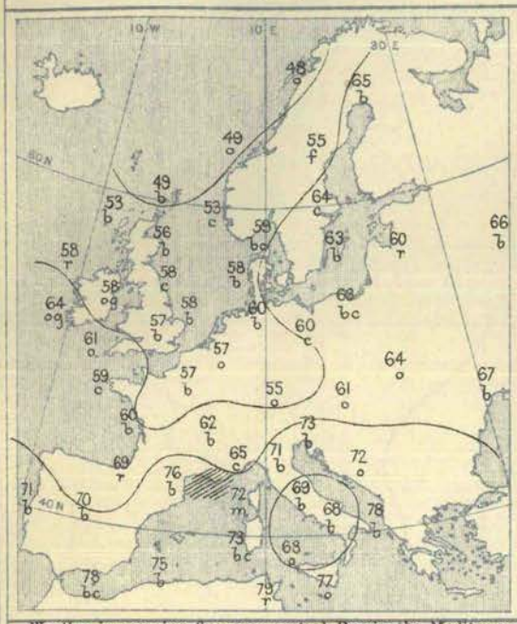
* An asterisk is inserted in all places for which the information is not usually received.

† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row) at the Kew Observatory, and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

Sunday, 6th August.

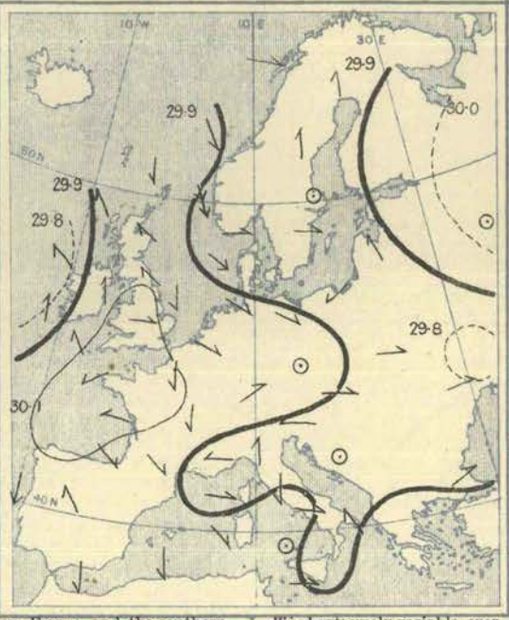
Temperature and Weather.

8 a.m.

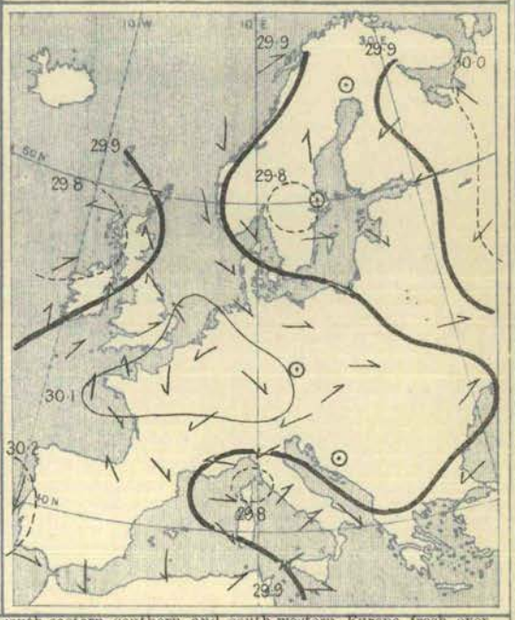


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning fine over central Russia, the Mediterranean, France, and the southern, central, and eastern parts of England; cloudy and unsettled over eastern Germany, Poland, and Austria, with rain in places; dull and unsettled in Norway, Wales, and west of England, rainy over Ireland. Much rain in west and north-west of our Islands later, smaller quantities in the north and showers over England. Heavy falls over Russia and also at Brindisi.

Temperature changing very fitfully. Morning readings highest, 70° to 78° over Spain, the southern and eastern shores of the Mediterranean and Adriatic, as well as at Constantinople, and exceeding 60° over Russia, the Baltic, central Europe, and the southern and south-western coasts of our Islands. Lowest, 48° to 49° on the north-west coast of Norway, 50° at Wick, 52° at Malin Head, 53° at Nairn, 57° in London and Paris. Rising later to a little more than 70° in the south of our Islands, to 74° at Paris and Lyons, to 81° at Nice, and 82° at Lisbon, and in some parts of Italy, and to 90° and more over central Algeria.

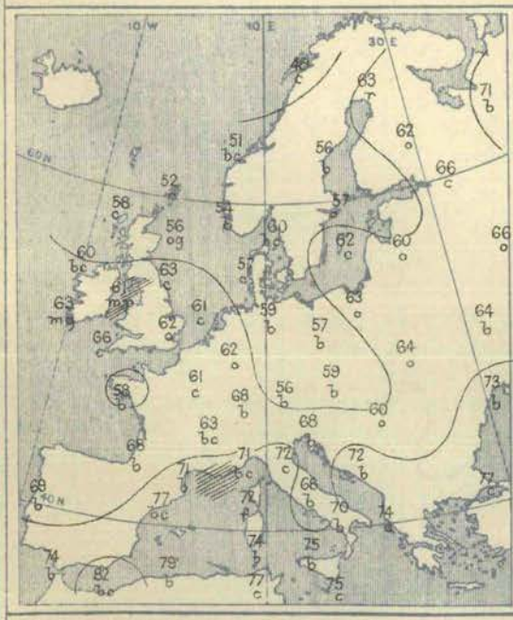
Wind extremely variable over south-eastern, southern, and south-western Europe, fresh over Spain, light elsewhere. Very changeable over the more northern countries—very fresh Southerly on our western coasts, moderate to a gale from North-West over the eastern sides of the North Sea and in the east of England, Westerly over Germany, Southerly on the eastern side of the Baltic and over the Gulf of Bothnia. South-Westerly and Southerly winds becoming general over England later, and a well-marked cyclonic circulation over the northern parts of the Mediterranean.

Barometer highest, (1) 30·1 ins. and more to 30·0 ins. over Spain, France, the Bay of Biscay, nearly the whole of Great Britain and adjacent parts of the North Sea; (2) 30·0 ins. and more over central Russia. Lowest, (1) below 29·8 ins. in depressions over the south of Russia, the Baltic Provinces, and the south of Scandinavia, and in a new one approaching our western coasts; 29·6 ins. in another advancing towards Lapland from the north-westward. Depression in west moving north-eastwards later, and spreading eastwards over the United Kingdom.

Monday, 7th August.

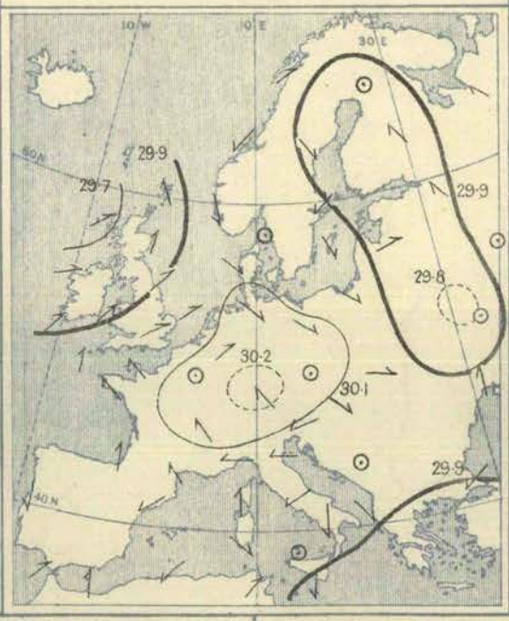
Temperature and Weather.

8 a.m.

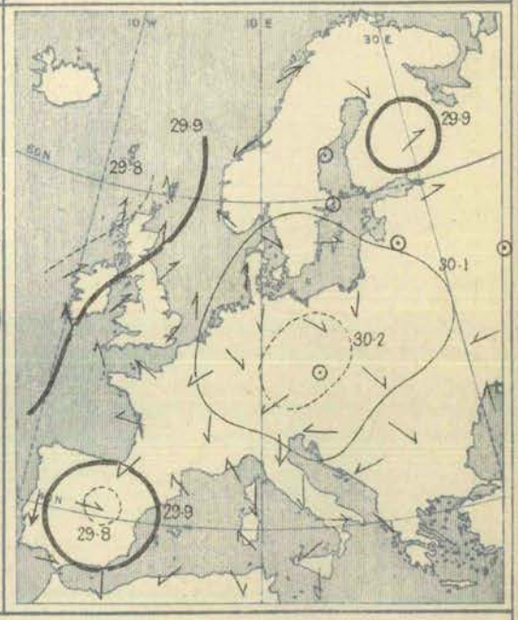


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning fine and bright over south-eastern, southern, and the greater part of central Europe, as well as over Norway. Cloudy or overcast over the British Islands, as well as over Finland and western Russia, with rain in several localities. Considerable rain over our western districts later, and in some parts of Scandinavia and Finland, smaller quantities in the west and north of Scotland; continuing very fine elsewhere, but a further heavy local fall at Brindisi and showers in Austria.

Temperature rising over our Islands and western Europe. Morning readings highest, 70° to 79° in the extreme south and south-east, and over Algeria, and exceeding 60° in most other places—as high as 71° at Archangel. Lowest, 48° at Bodö, 51° at Christiansund, 52° at Sumburgh Head, 56° at Munich, Cracow, and Breslau, 57° at Berlin and Münster. Rising later to 93° over Algeria and at Rochefort, 83° at Perpignan, 80° and more over Italy, 79° at Paris, and to between 75° and 80° over the inland parts of England.

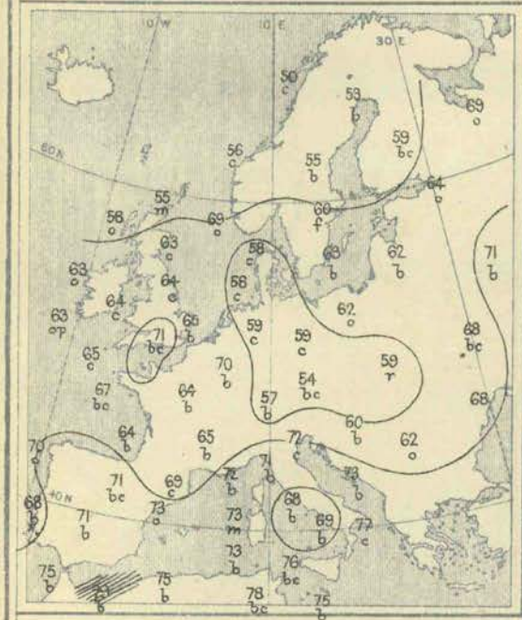
Wind light and anticyclonic over the greater part of the Continent; North-Easterly to North-Westerly over the Mediterranean, Easterly over the Bay of Biscay, South-Westerly and Southerly over the British Islands; but mainly Northerly over Scandinavia, North-Westerly to Westerly over Germany, South-Easterly over Finland. Backing gradually towards South and South-East over the British Islands later, but freshening from North-West at Lisbon.

Barometer highest, 30·2 ins. and more to 30·0 ins. over Germany, France, the south-east of England, the North Sea, and Norway, and exceeding 30·0 ins. over Tunis. Lowest, 29·8 ins. and less in a depression off our north-west coasts, in another over the south of Finland, and in a third over western Russia. Rising over the United Kingdom later, falling a little over Spain and France. The continental anticyclone spreading eastwards and northwards.

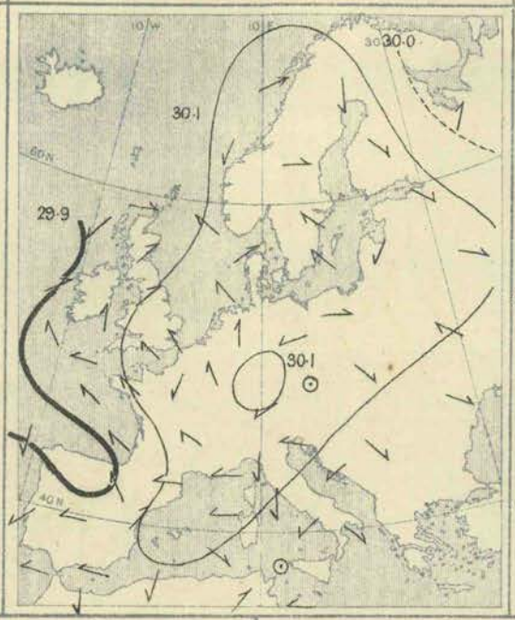
Judd & Co Ltd, Lith. 63, Carter Lane

Tuesday, 8th August.

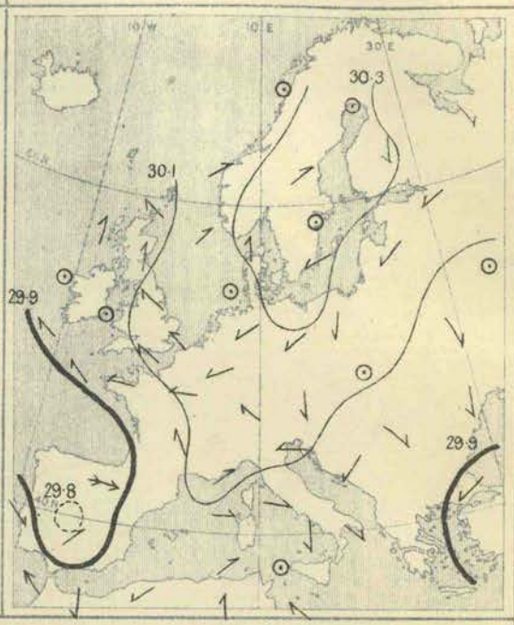
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over nearly the whole of Europe, cloudy, with an unsettled appearance over the greater part of our Islands, overcast in the west and north-west, with rain locally. Considerable rain in the Shetlands and Hebrides later, and on the south coast of the Baltic; small quantities in Scotland, Ireland, and some parts of western Russia, thunderstorm at Rochefort.

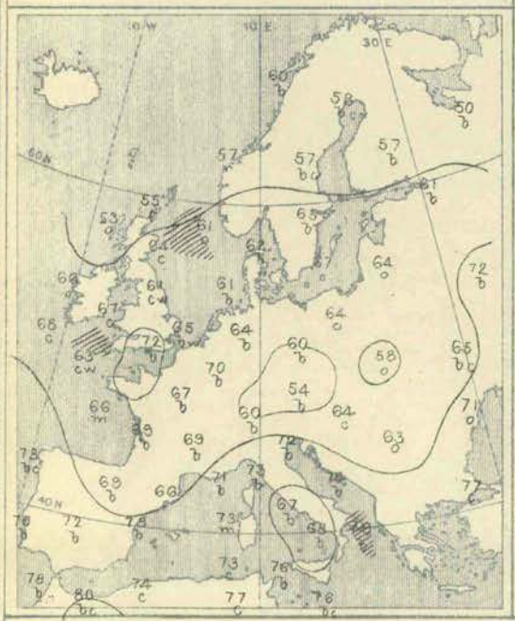
Temperature increasing decidedly over the western countries, falling over Finland. Morning readings highest, 70° to 79° over the Mediterranean and Spain, and 71° in London and Hurst Castle. Lowest, (1) 50° to 56° over the northern parts of Scandinavia and the Shetland Isles, to 55° to 59° over the central and southern parts of Germany. Rising during day to between 80° and 85° over England and Italy, to 83° at Paris and Palermo, and to between 90° and 97° in the west of France and over central Spain.

Wind light to moderate—from between North-West and North-East over south-eastern Europe, from East over Spain, from South-East over the Bay of Biscay and the British Islands, and from North-West over Finland. Becoming more Easterly at our southern stations later and freshening, but blowing hard from West at Biarritz for a time, and freshly from North-West at Lisbon.

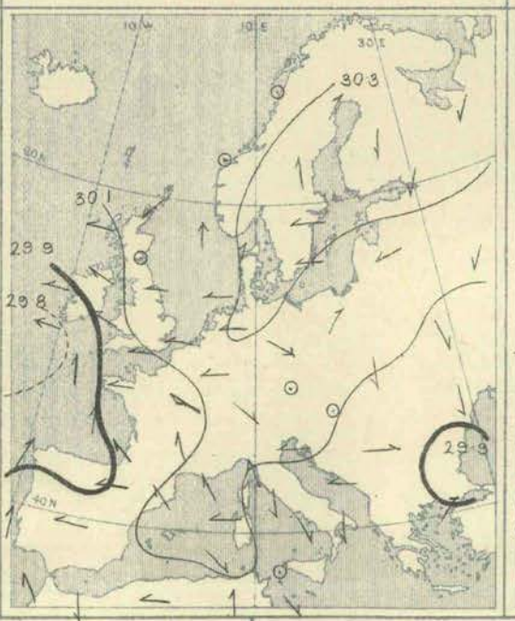
Barometer highest, 30·3 ins. to 30·0 ins. in a large anticyclone covering nearly the whole of Europe, and having its maximum over south Germany. Lowest, 29·9 ins. and less over the north of Spain, and off our extreme north-west coasts; 30·0 ins. and less over the White Sea and also over the extreme south-east of Europe. Rising over the northern countries later, falling over France and the southern parts of the United Kingdom. Anticyclone over Continent moving northward, depressions appearing over the Iberian Peninsula.

Wednesday, 9th August.

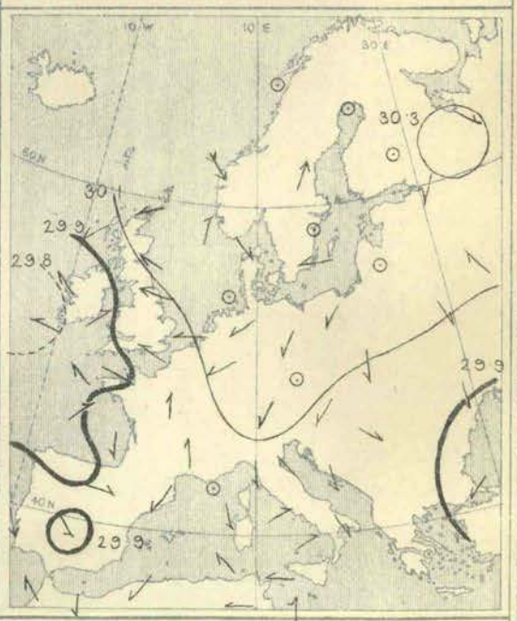
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over the greater part of the Continent (Poland, eastern Prussia, Hungary, and the south of Russia excepted), fine also over England and the south-east of Ireland, but cloudy and unsettled over the west of Ireland, Scotland, and Norway, rainy at Christiansund. Considerable rain in the last-named countries later, and sharp thunderstorms over our Islands and the western parts of France, but weather remaining fine in most other continental regions.

Temperature high generally. Morning readings exceeding 70° not only over the Mediterranean and southern Europe, but over central Russia and at several stations in the southern half of England; above 60° over all but the extreme northern countries and in some parts of south Germany and Hungary. Lowest, 50° at Archangel, 55° at Uleaborg and Sumburgh Head; 54° at Prague and Warsaw, 57° at Breslau, 58° at Lemberg. Rising later to between 80° and 90° in many parts of England, France, and Italy, and to 90° and more over Algeria and Spain, as well as at Biarritz and Lyons, and exceeding 70° on the Danish and Swedish coasts.

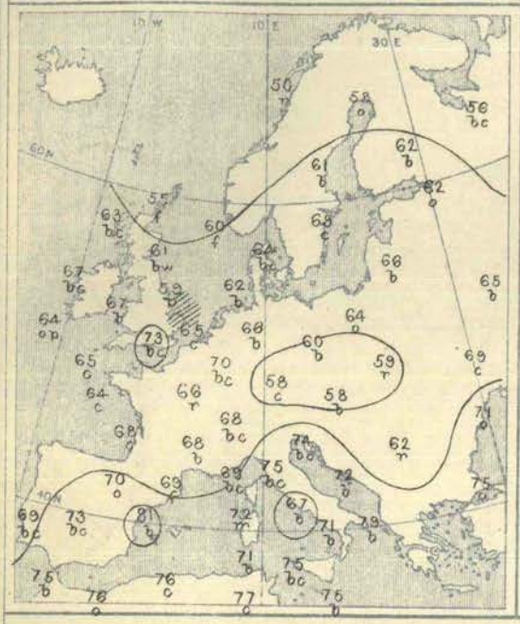
Wind light and extremely variable over the Continent, as a whole, but Southerly on the western coast of the Peninsula and at the mouth of the Channel, Easterly over the British Isles; not strong anywhere. Shifting to Southward in the west of Ireland later, and to South-Eastward in many parts of the United Kingdom, but becoming Westerly in the south of France, and North-Easterly over north Germany.

Barometer highest, 30·3 ins. and more to 30·2 ins. over all the northern parts of the Continent, the Baltic, central and southern Europe, and exceeding 30·0 ins. even in the extreme south of Spain and Italy and over Algeria. Lowest, 29·8 ins. and less in a depression off the south-west of Ireland, and 29·9 ins. and less in another over the western half of the Black Sea. The western depression moving northwards slowly later, but local disturbances forming over Spain and the southern parts of central France, and one advancing over our southern counties from the south-westward.

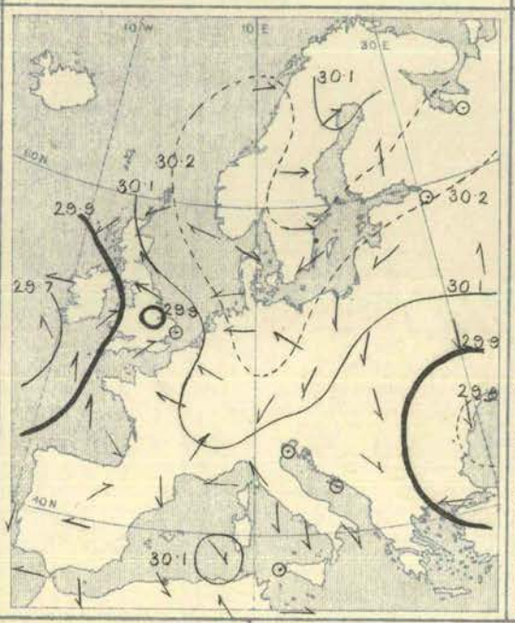
Judd & Co. Lith. 63 Carter Lane

Thursday, 10th August.

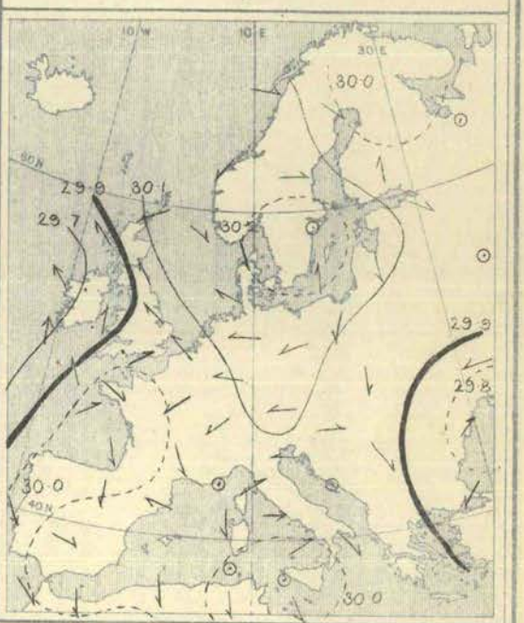
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over the Mediterranean and southern Europe, as well as over the Netherlands, and western Germany, the Baltic Provinces, and northern Russia; cloudy and unsettled elsewhere, with rain in many places, and thunder showers in the north-east and east of England. Steady rain over Hungary and Poland also. Heavy falls during day in the south of Ireland, in Poland, and in Hungary; rain in southern Russia, thunderstorms with considerable rain in the north and east of England and in France. Much lightning over the south of England at night.

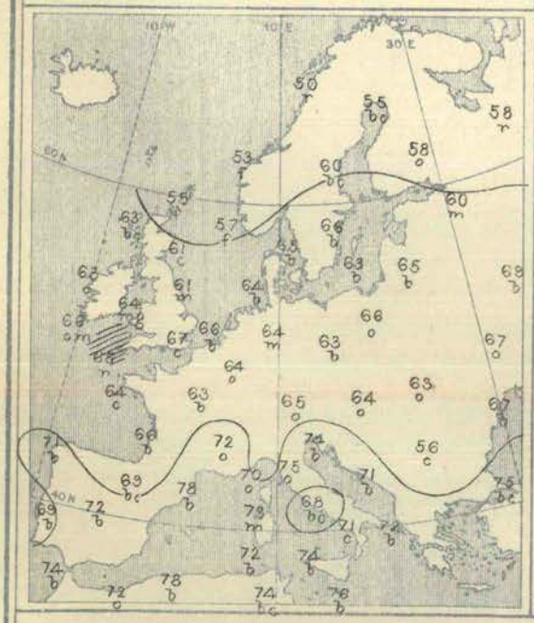
Temperature changing very fitfully. Morning readings exceeding 70° over all the southern countries and (locally) in London also. Lowest, 50° at Bodö, 55° at Christiansund and Sumburgh Head, 59° at Wick; above 60° elsewhere. Rising later to 81° at Loughborough and in London, to 85° at Brussels, to between 89° and 86° over southern Europe, as a whole, to 94° at Lyons, 96° at Gap, and upwards of 100° over central Spain and the inland parts of Algeria.

Wind exceedingly variable over the Continent; chiefly North-Easterly over the Baltic, Easterly over Germany, the Netherlands, and north-east of England, South-Easterly over Scotland and the north of Ireland, Southerly over our extreme south-western districts and Brittany, and Westerly to South-Westerly over the south-east of England. Not much change later over our Islands, but Northerly breeze setting in over France, while Easterly breeze prevailed over Germany, and a South-Westerly wind at Toulon, Leghorn, and Florence.

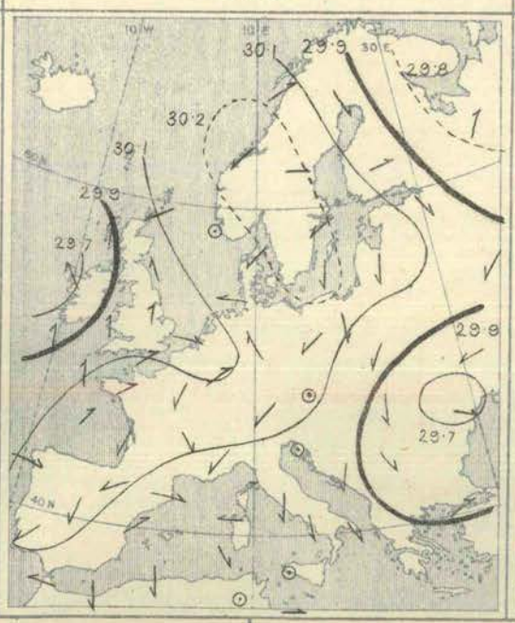
Barometer highest, 30·2 ins. and more to 30·1 ins. in an anticyclone of very complex form covering the greater part of northern and central Europe, and exceeding 30·0 ins. over southern Europe, the Mediterranean, and Algeria. Lowest, 29·7 ins. and less in a depression off the west of Ireland, and 29·9 ins. and less in a shallow secondary over Lincolnshire; 29·8 ins. and less in another over the northern part of the Black Sea; gradients very irregular. The depression in the west moving northwards later, that over Lincolnshire disappearing, but other shallow systems forming over the east of France.

Friday, 11th August.

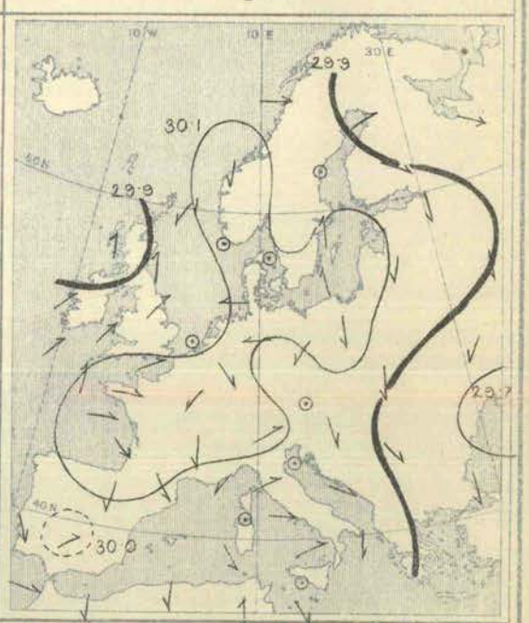
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over the greater part of Europe, but dull and unsettled over Austria-Hungary; cloudy or overcast over the greater part of the British Islands and Norway, with rain at several western and northern stations, fog at Skudesnaes and Sumburgh Head. Showers over the greater part of our Islands during some part of the succeeding 24 hours (fall at Cambridge 1·2 ins.) and thunder heard at the North Foreland. Rain in Austria-Hungary and the south of Russia also.

Temperature in morning highest, 89° at Madrid, exceeding 70° over the Mediterranean and south of Europe generally, and exceeding 60° except in the far north. Lowest, 50° at Bodö, 53° at Christiansund, 55° at Haparanda and Sumburgh Head. Rising later to 100° at Madrid, to 90° and more over Algeria, to between 80° and 90° over many parts of Italy and France, but failing to reach 80° over our Islands (except in London), and not touching 70° in the north of Ireland.

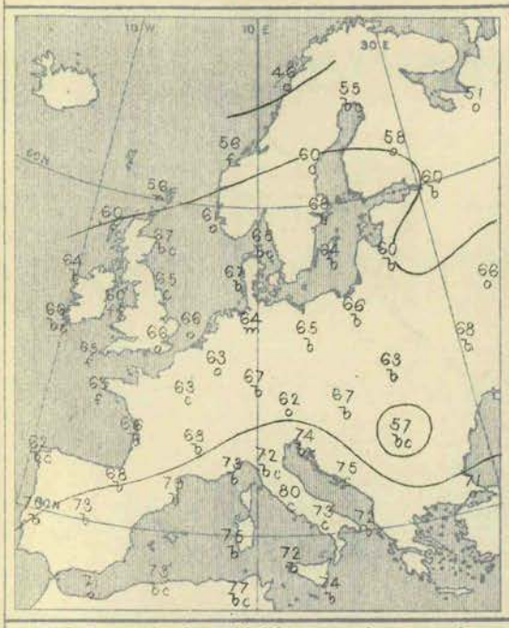
Wind very light in most places—mainly Northerly over the eastern half of Europe and in Italy, but Southerly (South-Westerly to South-Easterly) over the British Islands and west of France, and blowing a moderate to fresh breeze on our western coasts. Veering somewhat on our western and southern coasts later; little change elsewhere.

Barometer highest, 30·2 ins. and more to 30·1 ins. over Scandinavia, the Baltic, and eastern half of the North Sea, and exceeding 30·1 ins. in a band stretching from north Germany across France and the Bay of Biscay to the north of Spain. Lowest, 29·7 ins. and less in a depression off our extreme north-west coasts; 29·8 ins. and less in two others, one over the White Sea, and the other over the south of Russia. The western disturbance moving north-eastwards later and inclined to fill up.

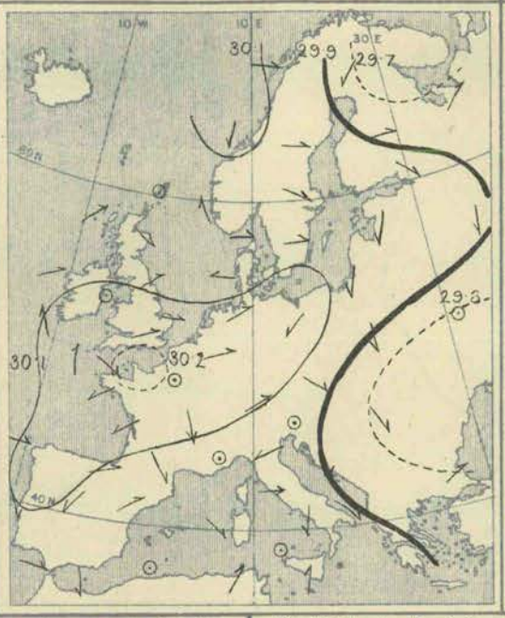
Judd & Co Ltd Lith. 63, Carter Lane.

Saturday, 12th August.

Temperature and Weather. — 8 a.m.



Barometer and Wind.



Weather in morning fine and bright over southern, central, eastern, and many parts of northern Europe, as well as in several localities in our Islands, cloudy or overcast in many parts of England, the Hebrides, Shetlands, and on the Norwegian coast, with rain at Sumburgh Head, and over the eastern half of the Channel, fog over the western half and off Ushant. A little rain later over the southern half of our Islands, the Netherlands, and some parts of north Germany, local showers over northern and south-eastern Europe. Faint lightning in London at night, and thick fog in many parts of England.

Temperature in morning exceeding 70° over the Mediterranean and the most southern parts of Europe (highest of all, 80° at Rome), 72° at Jersey, and exceeding 60° in almost all other places. Lowest, however, 46° at Bodö, 51° at Archangel, 56° at Christiansund and Sumburgh Head. Rising later to between 75° and 82° over England, to 81° at Paris, 85° to 88° over Italy, 91° at Rochefort, and 90° to 100° or more over various parts of Spain and Algeria. Night exceedingly close over England.

Wind light and anticyclonic over western Europe—Northerly to North-Easterly over France, Southerly to Westerly over the United Kingdom, Westerly to Northerly over Scandinavia and the Baltic; very variable over the south-eastern and southern countries. Backing to South-East on our south-western and southern coasts later, but no other change of importance.

Barometer highest, 30·2 ins. and more to 30·0 ins. in an anticyclone of irregular form covering the whole of western and north-western Europe, and having two maxima—one near Cherbourg, the other near Christiansund. Lowest, 29·8 ins. and less over the southern parts of Russia, and below 30·0 ins. over the north of Scotland, the Hebrides, and Shetlands. Rising slightly over our Islands later; no decided change elsewhere.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force is indicated thus: ⇛ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breese: and ⊙ = a calm. In the left-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Germany, Sweden, and Norway, and 7 a.m. in France, Algeria, Italy, Austria, and Russia; that for 6 p.m. is prepared from observations made at 6 p.m. in the British Islands and France, 7 p.m. in Algeria, 8 p.m. in Sweden and Norway, Germany, and Austria, and 9 p.m. in Russia, Belgium, and Italy. The time indicated in each case is the standard time for each country.

GENERAL NOTES.

At the commencement of this week an anticyclone was being developed over the Bay of Biscay, France, and England, and forcing itself between the depression systems over the Atlantic on the one hand and eastern Europe on the other, was separating, by a zone of fine weather, the rains which were falling over the extreme north-western countries from those over Russia and south-eastern Europe.

The new system spread quickly in an easterly direction and its dry warm weather increased in intensity and soon reached the eastern and south-eastern parts of the Continent, the weather over which regions was fine, dry, and very warm during the latter half of the week.

Late on the 9th, however, a depression again spread over our own western districts from the Atlantic, bringing with it heavy thunderstorms and rain, while a secondary system which appeared over England caused similar conditions over Great Britain, but in the latter country the storms were, as a whole, less continuous and severe than in Ireland. At the close of the week the air over England was extremely "close" and oppressive, but the sky was inclined to clear a little.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 188.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	STATIONS	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	26·4	?	25	?	EASTBOURNE	66·1	?	64	?
OSWALDKIRK (Yorkshire)	35·9	?	34	?	TENBY	34·0*	?	33*	?
WORKSOP	46·0	+11·2	44	+11	NEWQUAY	37·0	?	36	?
THURCASTON (Leicestershire)	48·9	+12·4	47	+12	TORQUAY	42·7*	?	41*	?
MARGATE	50·3	?	49	?	ARLEY COTTAGE (County Cavan)	35·3	?	33	?
WESTBOURNE (Sussex)	50·1*	?	57*	?	GUERNSEY	73·2*	?	72*	?
BRIGHTON	58·5	?	57	?					

* The values at Westbourne, Tenby, Torquay and Guernsey are obtained by Jordan's Photographic Recorder.

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WEEKLY WEATHER REPORT.

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VOL. X. No. 33.] *Third Series.* WEEK ENDING SATURDAY, 19TH AUGUST, 1893. [*Price 6d.* *Annual Subscription, post paid, £1 10s. 0d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871-90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the twenty-five years 1866-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the ten years 1881-90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

	DISTRICTS. (See p. 194.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 1st, 1893. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	85	45	69·9	54·6	61·8	7 above.	139	+58	0	0	1753	+538	485	- 57
	1. SCOTLAND, EAST	85	44	74·5	55·6	64·5	8 above.	158	+55	0	0	1941	+352	548	- 21
	2. ENGLAND, N.E.	90	50	77·4	59·3	67·8	10 above.	181	+72	0	0	2070	+395	436	- 62
	3. ENGLAND, EAST	92	53	81·7	58·8	69·6	9 above.	193	+72	0	0	2444	+485	524	- 37
	4. MIDLAND COUNTIES	93	53	83·0	58·1	69·8	11 above.	195	+79	0	0	2569	+620	505	- 47
	5. ENGLAND, SOUTH	93	53	79·8	60·9	69·8	9 above.	195	+65	0	0	2638	+527	373	- 43
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	79	46	71·7	56·4	63·6	7 above.	151	+52	0	0	2108	+481	354	- 63
	7. ENGLAND, N.W.	85	51	75·3	60·7	67 6	9 above.	179	+68	0	0	2400*	+647	323	- 91
	8. ENGLAND, S.W.	88	52	74·5	58·8	66·2	7 above.	169	+51	0	0	2610	+658	246	- 70
	9. IRELAND, NORTH	84	51	73·4	58·8	65·7	9 above.	166	+62	0	0	2295	+547	253	-104
	10. IRELAND, SOUTH	82	53	73·9	60·1	66·6	8 above.	172	+60	0	0	2582	+602	178	-100
	—CHANNEL ISLANDS	89	59	76·7	61·7	38·7	7 above.	187	+55	0	0	2892	+742	70	- 52

Rainfall. Bright Sunshine.

	DISTRICTS. (See p 194.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the mean for the Week.	From Jan. 1st, 1893. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 1st, 1893. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of ins.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	6	8	1 less.	142	- 8	24·4	- 3·7	29	+ 4	28	+ 3	780	- 82	25	- 3
	1. SCOTLAND, EAST	3	6	2 less.	116	- 7	15·2	- 3·5	57	+ 19	54	+15	1006	+ 3	32	0
	2. ENGLAND, N.E.	1	2	4 less.	99	-13	12·7	- 2·8	60	+ 29	59	+26	1126	+206	33	+ 6
	3. ENGLAND, EAST	0	less than ½	5 less.	97	-12	12·0	- 3·3	67	+ 30	67	+25	1350	+244	44	+ 8
	4. MIDLAND COUNTIES	1	less than ½	6 less.	97	-12	12 1	- 4·9	60	+ 23	59	+22	1264	+277	41	+ 9
	5. ENGLAND, SOUTH	1	less than ½	5 less.	91	-14	11·8*	- 4·1	72	+ 31	72	+30	1399	+334	46	+ 11
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	3	6	4 less.	114	-16	21·4	- 7·7	50	+ 15	48	+15	1129	+134	37	+ 5
	7. ENGLAND, N.W.	2	4	3 less.	103	-15	16·1*	- 3·5	50	+ 14	48	+15	1139*	+153	37	+ 5
	8. ENGLAND, S.W.	2	4	4 less.	96	-25	18·3	- 4·7	60	+ 12	60	+14	1459	+301	48	+ 10
	9. IRELAND, NORTH	5	9	1 more.	125	-15	19·7	- 1·7	42	+ 12	41	+14	985	+ 72	32	+ 2
	10. IRELAND, SOUTH	3	8	0 (average)	111	-17	18·8	- 4·5	45	+ 9	45	+10	1079	+ 29	35	+ 1
	—CHANNEL ISLANDS	1	1	5 less.	100	-28	13·6	- 4·7	83	+ 29	84	+30	1738*	+375	57	+ 12

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather during this period was bright, dry, and very hot over the greater part of the Kingdom, but in the extreme west and north the conditions were unsettled, and rain was of frequent occurrence. Thunderstorms were experienced in the north and north-west on Tuesday night, and towards the end of the week similar phenomena occurred locally in various parts of Ireland and England.

Temperature was extremely high, exceeding the mean by 11° in the Midland Counties, 10° in England N.E., 9° in most of the other English districts and in Ireland N., and by 7° or 8° elsewhere. The height of the maxima over England increased gradually day by day, and reached its culminating point on Friday, when the readings varied from 93° in England S. and the Midland Counties (in London and at Stamford), 92° in England E., and 90° in England N.E. (at Scarborough), to 85° in England N.W. Over Ireland and Scotland the highest readings were recorded earlier in the week, and ranged from 79° in Scotland W. to 82° in Ireland S., and to 85° in Scotland N. and E. The lowest of the minima occurred during the early part of the week, and ranged from 44° to 46° in Scotland, and from 51° to 53° in Ireland and nearly all parts of England. In the Channel Islands, however, the lowest reading was 59°. During the greater part of the week the nightly minima were unusually high; on the night of the 17th to 18th the thermometer in London did not fall below 72°.

Rainfall was slightly more than the mean in Ireland N., and just equal to it in Ireland S.; in all other districts there was a deficit. Over eastern, central, and southern England the fall was scarcely appreciable.

Bright Sunshine was very abundant, exceeding the mean considerably in almost all districts. The percentage of the possible duration ranged from 84 in the Channel Islands, to between 59 and 72 in most of the English districts, to 41 in Ireland N., and to 28 in Scotland N.

Barometer and Wind.—During the earlier part of the period the distribution of pressure was anticyclonic and the winds variable and very light. Later on, however, depressions appeared in the west and north-west, and spreading gradually eastwards, caused Southerly and South-Westerly breezes to prevail over the whole Kingdom. By the end of the week the depressions were increasing in intensity and the southerly gradients becoming steeper.

* This value has been altered owing to further information for a preceding week.

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II.—DATA from which the SUMMARY on page 193 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°				Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	65	49	60·7	52·3	56·3	+ 3·4	100	0	6	0·36	−0·36	*	*	*	*
	Stornoway	68	55	66·0	56·1	60·8	+ 6·9	132	0	7	1·92	+1·09	30·7	+ 3·5	29	+ 3
	Wick	85	52	72·7	54·6	63·1	+ 8·7	148	0	4	0·36	−0·23	*	*	*	*
	Lairg Ⓢ	79	47	75·9	53·3	63·9	+ 9·4	153	0	7	0·58	−0·05	*	*	*	*
	Glencarron Ⓢ	77	48	70·3	55·3	62·4	+ 8·2	143	0	7	0·76	−0·74	*	*	*	*
	Fort Augustus Ⓢ	81	49	73·9	56·1	64·5	+ 8·8	158	0	4	0·53	−0·16	26·4	?	25	?
	Fort William Ⓢ	75	48	69·8	56·0	62·5	+ 6·0	144	0	5	1·04	−0·26	30·9	?	29	?
1. SCOTLAND, E.	Nairn	77	53	73·1	55·1	63·6	+ 7·1	151	0	4	1·18	+0·56	*	*	*	*
	Aberdeen	78	53	72·3	56·4	63·9	+ 7·6	153	0	4	0·99	+0·31	51·9	+16·9	49	+15
	Braemar Ⓢ	76	44	71·7	51·8	61·2	+ 7·7	134	0	4	0·18	−0·66	53·7†	?†	51†	?†
	Ochtertyre Ⓢ	82	54	77·3	56·4	66·2	+10·0	169	0	4	0·23	−0·57	*	*	*	*
	Leith	85	52	76·0	57·1	66·0	+ 7·9	168	0	1	0·44	−0·15	*	*	*	*
	Marchmont Ⓢ	83	50	76·3	56·9	66·0	+10·1	168	0	2	0·35	−0·44	67·0	?	64	?
2. ENGLAND, N.E.	Alnwick Castle	80	56	73·7	59·1	66·0	+ 9·5	168	0	1	0·31	−0·39	*	*	*	*
	Durham	86	50	79·9	56·3	67·4	+ 9·4	178	0	2	0·17	−0·45	60·5	+26·0	59	+26
	Shields	83	55	76·4	58·9	67·1	+ 9·5	176	0	2	0·69	+0·05	*	*	*	*
	Scarborough Ⓜ	90	59	73·7	61·5	70·1	+11·9	197	0	0	—	−0·60	*	*	*	*
	York	86	52	80·0	58·9	68·8	+ 9·7	188	0	1	0·01	−0·57	?59·3	? +26·1	?58	? +26
	Spurn Head	87	59	74·6	61·1	67·5	+ 8·0	179	0	0	—	−0·42	*	*	*	*
3. ENGLAND, E.	Hillington Ⓜ	89	53	83·5	57·0	69·5	+ 9·5	193	0	0	—	−0·60	70·0	+30·9	69	+30
	Yarmouth	85	57	74·4	61·9	67·8	+ 7·4	181	0	1	0·01	−0·48	*	*	*	*
	Geldeston	90	53	82·2	58·8	69·8	+ 9·7	195	0	1	0·01	−0·41	67·1	+23·9	66	+23
	Cambridge	92	57	85·3	59·9	71·8	+10·8	209	0	0	—	−0·50	67·2	+27·3	67	+27
	Rothamsted	91	55	83·2	56·5	69·1	+ 9·5	190	0	0	—	−0·55	64·8	?	64	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	91	53	83·4	57·4	69·6	+10·4	193	0	0	—	−0·54	*	*	*	*
	Loughborough	91	53	85·4	59·1	71·5	+11·1	207	0	1	0·01	−0·56	*	*	*	*
	Stamford (Ketton Hall)	93	53	84·4	56·9	69·8	+ 9·4	195	0	0	—	−0·49	*	*	*	*
	Cheadle Ⓜ	83	57	79·4	59·7	69·0	+11·8	189	0	1	0·01	−0·79	*	*	*	*
	Churchstoke Ⓜ	86	54	81·1	57·7	68·7	+11·1	187	0	1	0·17	−0·43	58·9	+21·1	58	+21
	Hereford Ⓜ	87	56	84·3	57·6	70·2	+10·3	197	0	1	0·06	−0·48	*	*	*	*
	Cirencester	85	54	82·0	55·9	68·2	+ 9·8	183	0	1	0·01	−0·69	62·7	+22·1	62	+22
	Oxford	89	58	84·1	60·4	71·5	+11·1	207	0	0	—	−0·50	66·9	+25·7	66	+25
5. ENGLAND, S.	London	93	57	86·6	61·1	73·1	+11·0	218	0	0	—	−0·50	64·1†	+27·1†	63†	+26†
	North Foreland	89	61	76·0	63·3	69·3	+ 9·0	191	0	1	0·03	?	*	*	*	*
	Strathfield Turgiss Ⓜ	91	53	86·0	56·0	70·1	+ 9·4	197	0	1	0·01	−0·47	*	*	*	*
	Dungeness	79	57	73·7	60·6	66·8	+ 5·1	174	0	1	0·16	−0·30	*	*	*	*
	Hastings (St. Leonards)	82	62	77·0	63·6	69·9	+ 8·0	195	0	0	—	−0·54	78·0	+32·3	78	+32
	Southampton	87	57	81·4	60·9	70·5	+ 8·9	200	0	0	—	−0·58	76·8	+31·0	77	+31
	Hurst Castle	82	60	77·9	63·1	70·1	+ 8·4	197	0	0	—	−0·51	*	*	*	*
	Stowell Ⓜ	85	56	79·6	58·4	68·4	+ 9·1	185	0	1	0·09	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	79	51	73·3	56·4	64·3	+ 7·6	156	0	5	0·72	−0·46	*	*	*	*
	Glasgow	78	51	73·1	58·0	65·1	+ 8·7	162	0	2	0·14	−0·71	49·0	+19·8	47	+19
	Ardrossan	76	52	70·3	58·1	63·8	+ 5·9	153	0	4	0·22	−0·63	*	*	*	*
	Glenlee Ⓢ	79	46	72·8	54·2	62·9	+ 6·9	146	0	3	1·01	+0·01	*	*	*	*
	Douglas (Isle of Man)	76	51	69·0	55·2	61·7	+ 4·8	138	0	3	0·80	−0·01	50·8	+12·3	49	+11
7. ENGLAND, N.W.	Stonyhurst	79	51	75·6	59·2	66·9	+ 8·8	174	0	2	0·35	−0·73	51·7	+17·9	50	+17
	Blackpool Ⓜ	79	60	74·3	61·7	67·6	+ 8·4	179	0	2	0·81	+0·11	50·2	+14·2	49	+14
	Manchester	84	54	78·9	59·6	68·7	+10·4	187	0	1	0·14	−0·66	46·8†	?	46†	?
	Liverpool Obsy. (Bidston)	85	60	77·6	62·3	69·5	+10·0	193	0	2	0·20	−0·45	*	*	*	*
	Llandudno Ⓜ	82	59	74·7	61·5	67·7	+ 7·8	180	0	2	0·32	−0·28	49·1	+13·8	48	+13
	Holyhead	78	57	70·7	59·9	65·0	+ 5·9	161	0	3	0·83	+0·19	*	*	*	*
8. ENGLAND, S.W.	Llandovery	88	57	81·6	58·4	69·3	+10·2	191	0	2	0·20	−0·83	*	*	*	*
	Pembroke	75	58	68·7	60·9	64·6	+ 5·4	158	0	3	0·37	−0·26	47·2	+ 1·5	47	+ 2
	Bristol (Montpelier)	?	59	?	61·6	?	?	?	0	1	0·18	?				
	Arlington (N. Devon)	82	53	75·6	57·9	66·2	+ 8·1	169	0	2	1·44	+0·32	*	*	*	*
	Cullompton Ⓜ	84	52	80·0	55·5	67·0	+ 7·9	175	0	1	0·18	−0·44	69·3	+27·8	69	+28
	Falmouth	74	59	71·1	59·9	65·2	+ 5·2	162	0	2	0·21	−0·59	57·5	+11·0	58	+11
	Plymouth	79	57	72·2	58·3	64·8	+ 3·4	160	0	2	0·35	−0·27	56·0	+12·0	56	+12
	Prawle Point	76	55	72·0	60·7	66·0	+ 6·5	168	0	1	0·01	−0·47	*	*	*	*
9. IRELAND, N.	Malin Head	79	56	71·0	59·9	65·1	+ 7·6	162	0	6	0·36	?	*	*	*	*
	Londonderry	84	55	78·1	59·3	68·1	+10·5	183	0	6	0·94	+0·06	*	*	*	*
	Edenfel (Omagh)	81	53	74·6	58·1	65·9	+ 9·3	167	0	4	0·57	−0·23	*	*	*	*
	Belmullet	72	58	68·7	60·6	64·4	+ 5·6	157	0	4	2·41	?	*	*	*	*
	Markree Castle	80	54	74·6	58·0	65·8	+ 9·4	167	0	5	0·36	−0·44	36·8	+ 7·9	36	+ 8
	Brookeborough	81	55	74·8	59·0	66·4	+10·0	171	0	5	0·76	−0·02	*	*	*	*
	Armagh	79	54	73·8	58·1	65·5	+ 8·2	165	0	4	0·84	+0·18	46·0	+19·2	45	+19
	Donaghadee	72	56	69·0	59·0	63·7	+ 7·0	152	0	3	0·37	−0·33	*	*	*	*
	Edgeworthstown	81	51	75·7	57·5	66·1	+ 9·1	169	0	5	1·22	+0·44	*	*	*	*
10. IRELAND, S.	Dublin	80	58	74·8	61·7	67·9	+ 8·6	181	0	2	0·70	+0·08	56·5	+20·0	55	+19
	Parsonstown	82	54	77·6	60·6	68·6	+10·5	186	0	4	1·00	+0·23	47·5	+14·6	47	+15
	Kilkenny	80	53	75·6	60·0	67·3	+ 8·9	177	0	3	0·77	+0·01	*	*	*	*
	Waterford	77	54	73·5	59·9	66·3	+ 6·9	170	0	3	0·86	+0·06	*	*	*	*
	Roche's Point	72	57	69·6	60·0	64·5	+ 4·9	158	0	4	0·76	−0·06	*	*	*	*
	Valencia	80	57	71·7	59·9	65·5	+ 6·5	165	0	4	1·16	+0·09	31·9	− 4·4	32	− 4
	Killarney	80	55	73·5	60·0	66·4	+ 7·8	171	0	4	0·99	?	*	*	*	*
	Foynes	82	55	75·0	58·7	66·4	+ 8·2	171	0	2	0·21	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	75	60	70·6	60·4	65·2	+ 4·6	162	0	1	0·13	−0·42	*	*	*	*
	Jersey	89	59	82·7	62·9	72·2	+ 9·5	211	0	1	0·01	−0·49	83·7	+28·8	85	+30

Stations marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

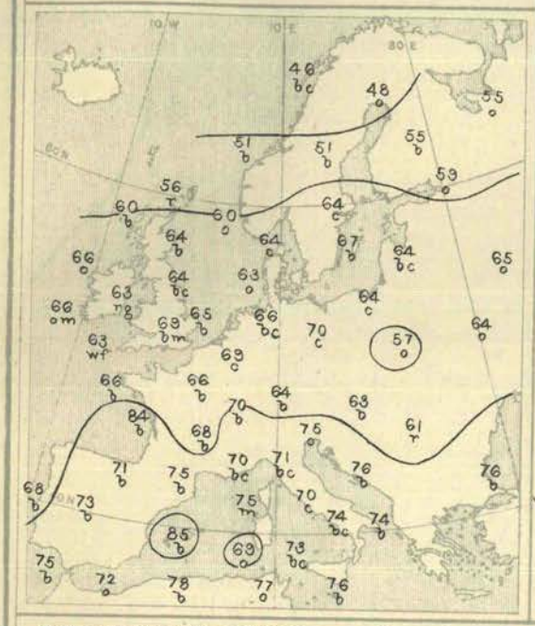
* An asterisk is inserted in all places for which the information is not usually received.

† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row) at the Kew Observatory, and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

Sunday, 13th August.

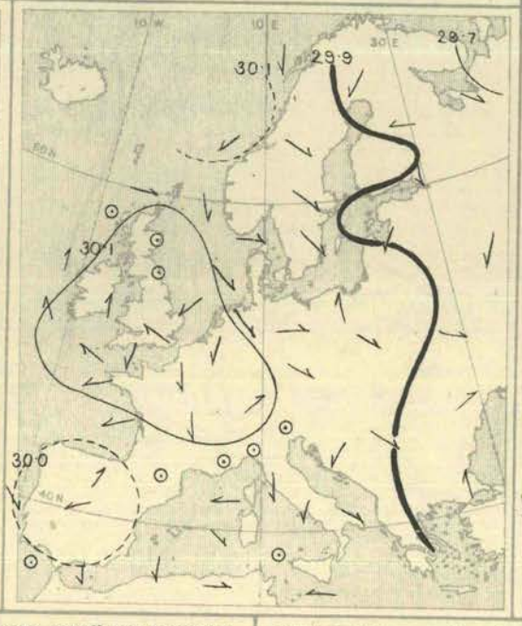
Temperature and Weather.

8 a.m.

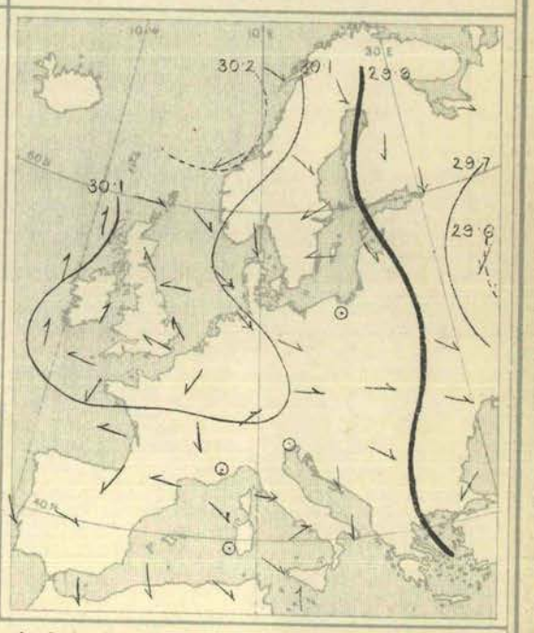


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning fine and bright over southern and central Europe, as well as in many parts of Great Britain and Scandinavia; very variable elsewhere, cloudy or overcast in Ireland, very foggy on our south-western and southern coasts, dull over Russia, rainy at Hermanstadt. A little rain later in Ireland and the western and northern parts of Scotland and Norway, more over eastern Prussia, Austria, Poland, and western Russia, thunderstorm at Vienna; fog clearing somewhat on our coasts, but air close, hazy, and sultry during the day.

Temperature showing no decided change of a general character, but altering fitfully in many places. Morning readings exceeding 70° over southern Europe, and as high as 84° at Rochefort. Exceeding 60° in almost all other places. Lowest, 46° at Haparanda, 48° at Uleaborg, 51° at Christiansund and Hernösand, and 56° at Sumburgh Head. Rising later to 80° and more in several parts of England, to 84° at Paris, 86° in some parts of Italy, and 90° in the west and south of France.

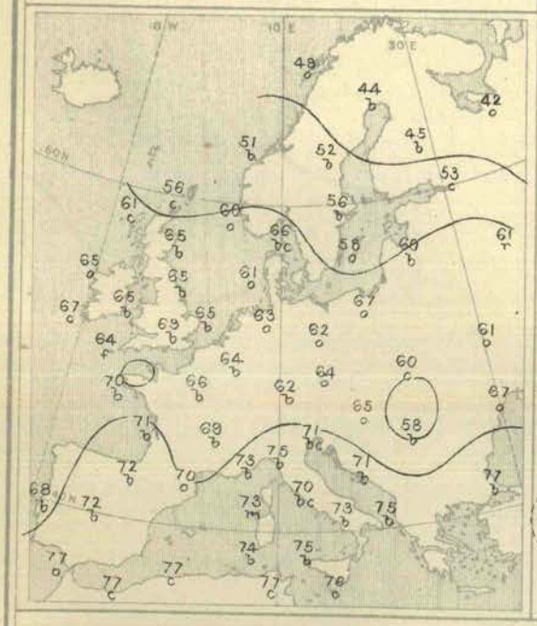
Wind very light generally and anticyclonic; Easterly over the Bay of Biscay, South-Easterly to Southerly on our western coasts, calm in Scotland, and mainly North-Westerly over northern and eastern Europe, extremely variable over the southern countries. No decided change in our Islands during day, but Northerly breezes setting in over Finland and the Gulf of Bothnia.

Barometer highest, 30·1 ins. and more to 30·0 ins. in a large anticyclone covering the whole of the British Islands and north-western Europe. Lowest, 29·8 ins. and less over the northern and the southern parts of Russia, and below 30·0 ins. over Spain. Anticyclone undergoing no important change later, but barometer falling a little over Portugal and the north of Spain.

Monday, 14th August.

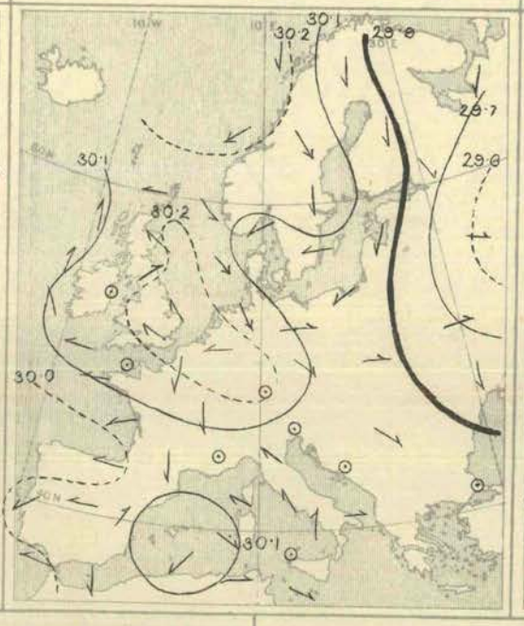
Temperature and Weather.

8 a.m.

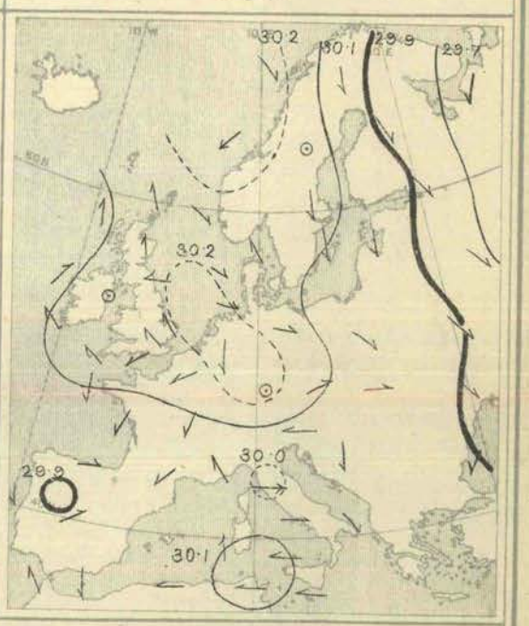


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning fine and bright over the whole of southern and western Europe and nearly the whole of the British Islands, dull at our extreme western stations and in the extreme north of Scandinavia; dull and unsettled over Russia and eastern Germany, rainy at Breslau. Slight rain in the north of Scotland later, 0·3 in. at the Scaw, showers over Germany and Russia, and about 0·5 in. at Lemberg and Kharkov.

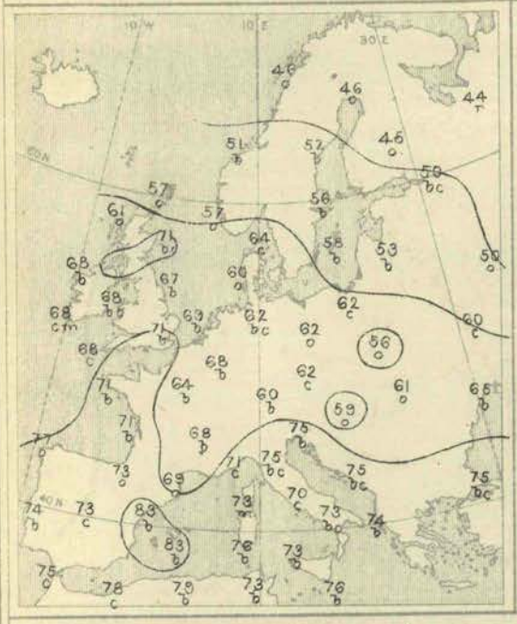
Temperature in morning, 81° at Barcelona, and exceeding 70° over the Mediterranean and southern Europe as a whole; exceeding 60° over our Islands and the greater part of Europe, lower in the north. Lowest of all, 42° at Archangel, 44° at Haparanda, 48° at Bodö, 51° at Christiansund. Rising later to 70° and more in the east of Scotland, 72° at Belmullet, 80° to 85° over England, 90° and more on the western coasts of France and Portugal, and 85° to 90° in many parts of Italy.

Wind Northerly, moderate to fresh, over northern Europe and the Baltic Provinces, Westerly and North-Westerly over Hungary and the south of Russia; North-Westerly, strong, in Holstein and at Hernösand, and North-Easterly, strong, at Christiansund. Light and anticyclonic over the British Islands and their neighbourhood—mainly Easterly over the Bay of Biscay, South-Easterly to Southerly on our west and north-west coasts. No decided change later.

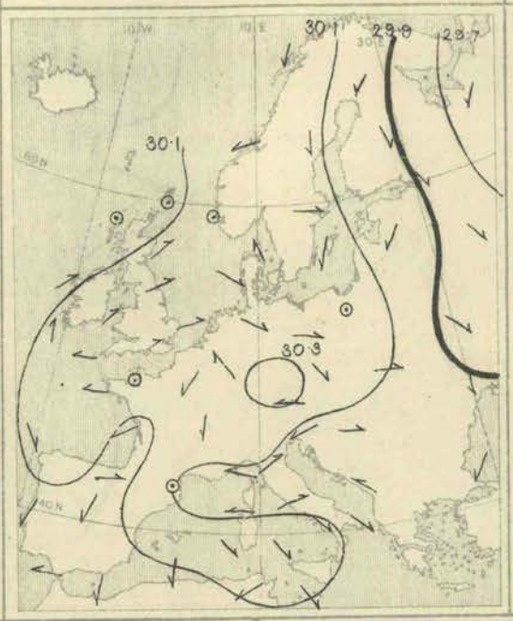
Barometer highest, 30·2 ins. and more to 30·1 ins. in an anticyclone of irregular force, covering north-western Europe and the United Kingdom. Lowest, 29·7 ins. and less over central Russia, and below 30·0 ins. over the south-west of France and the north of Spain. Rising over the eastern part of Europe later, and a well-formed (but shallow) depression forming over central Spain.

Tuesday, 15th August.

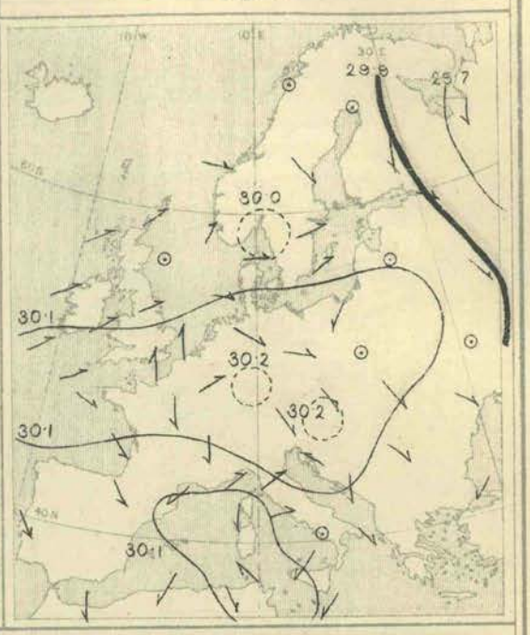
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over central, southern, and western Europe, including England, the east of Ireland, and the Baltic; cloudy or overcast elsewhere, with rain at Archangel. Rain, thunder, and lightning later over Scotland and the northern parts of Ireland and England, rain at times over northern Europe, the Baltic, Germany, Austria, and south of Russia. Very fine weather over the more western countries.

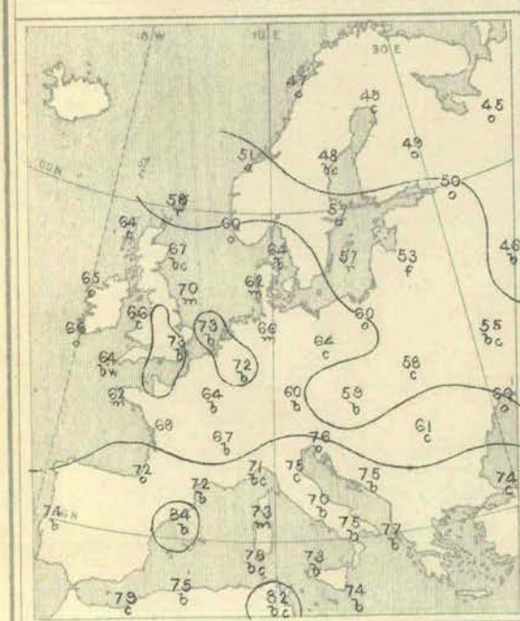
Temperature increasing in the north-west. Morning reading highest, 70° and more over the Mediterranean, south-western and southern Europe, as well as at some stations in the south of England, and at Aberdeen; below 60° over most of the northern countries, and, lowest of all, 44° at Archangel, 46° over Lapland, 50° at St. Petersburg and Moscow, 53° at Riga. Rising later to between 85° and 88° in many parts of England and Italy, to 90° or more over the west of France and in Algeria.

Wind very light and anticyclonic over the British Isles and western Europe, light Northerly to North-Westerly over Sweden, the Baltic, Finland, and northern Russia, North-Westerly over Poland, Westerly over Hungary, South-Westerly at Kharkov. Becoming North-Westerly over the south of Russia later; no decided change elsewhere.

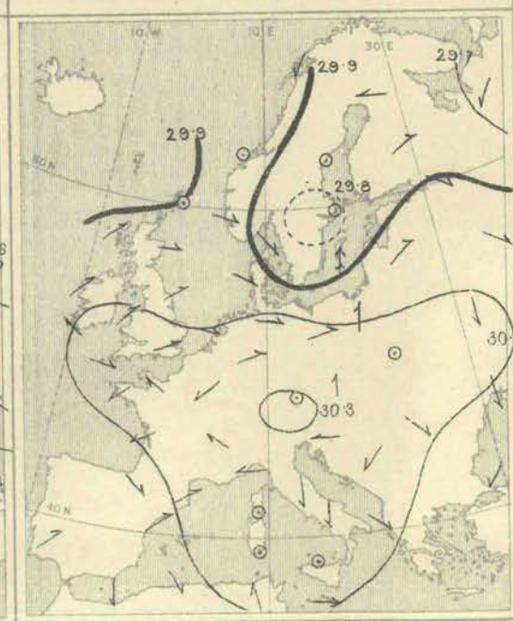
Barometer highest, 30·3 ins. to 30·1 ins. in a vast area stretching from the Atlantic (off the north-west of Scandinavia) across Norway, Sweden, the Baltic, North Sea, central and southern Europe, to the Mediterranean. Lowest, (1) about 29·6 ins. over north-eastern, 29·7 ins. over southern Russia, and apparently 30·0 ins. and less over the Atlantic at a little distance from our own and the European coasts. Falling somewhat in Scotland and Norway later.

Wednesday, 16th August.

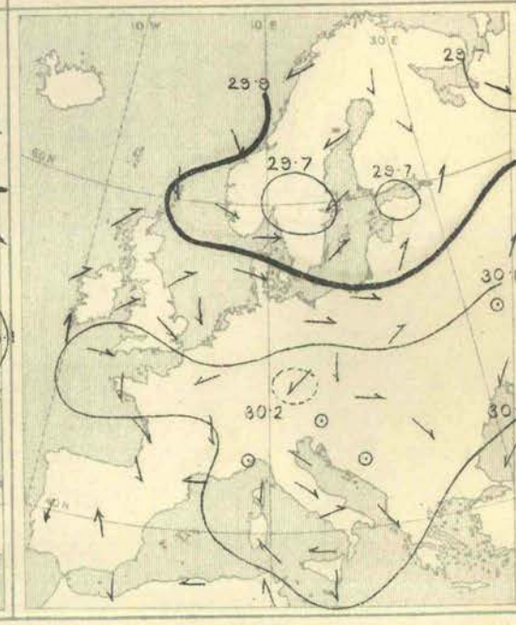
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning very fine and bright over the Mediterranean, Austria, France, Spain, and the greater part of the British Islands, dull on our extreme western and northern coasts, in Norway, over the Baltic, and the greater part of Germany and Russia; rainy at Sumburgh Head, Wisby, and Kharkov. A little rain later at our extreme western and northern stations, and larger quantities over northern Europe, the Baltic, and north Germany. Lightning seen at Wick, much cirrus moving from west over London.

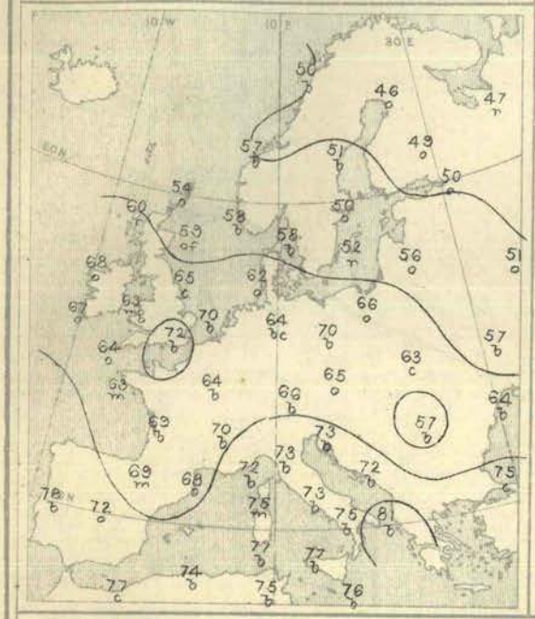
Temperature changing fitfully, but, as a whole, increasing over our Islands. Morning readings highest, 70° to 84° on the shores of the Mediterranean and the coasts of the Iberian Peninsula, 75° at Jersey, 73° in London. Below 60° at the most northern stations and over Russia and Hungary; lowest of all, 45° at Archangel, 47° at Bodö, 48° at Hernösand, 50° at St. Petersburg, 51° at Kharkov. Rising later to nearly 80° over Germany, to 88° at Lisbon and Paris, 84° to 90° over England and Italy, 91° to 93° in the west of France.

Wind very light, variable, and anticyclonic over the southern half of the Continent; Easterly over the Bay of Biscay, South-Easterly to Southerly on our western coasts, South-Westerly in the north and north-east, North-Westerly in Denmark. A Southerly gale reported at Wisby, this gale dying down later, but no marked change occurring elsewhere.

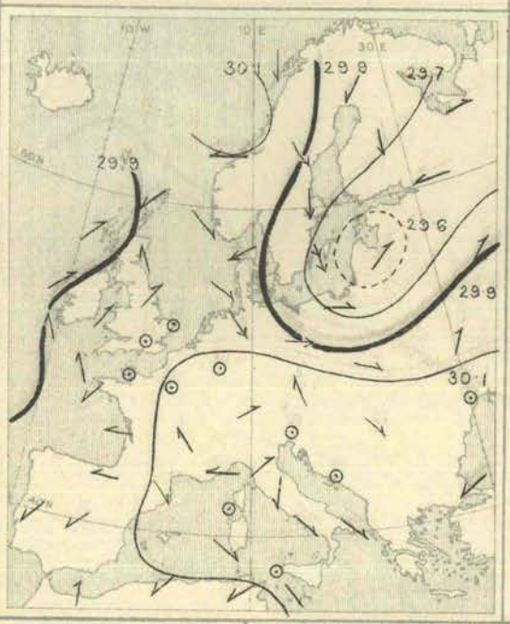
Barometer highest, 30·3 ins. to 30·1 ins. over central Europe, the Mediterranean, and the southern half of our Islands. Lowest, 29·8 ins. and less in a depression near Stockholm, and below 29·9 ins. over the Faröe and Shetland Islands. Falling fast over the Baltic and irregularly over the British Isles later.

Thursday, 17th August.

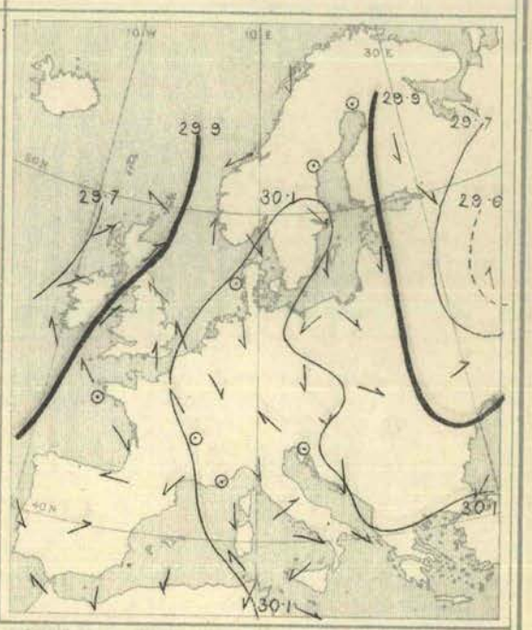
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over south-eastern, southern, and western Europe, including the greater part of England; dull over Ireland and Scotland, as well as over the northern half of Russia and the Baltic, rain in some of these localities, fog in the north-east of Scotland. Rain later at the Irish and several of the Scotch stations (very heavy at Belmullet), and a considerable fall over central Russia, but weather very fine over the rest of Europe.

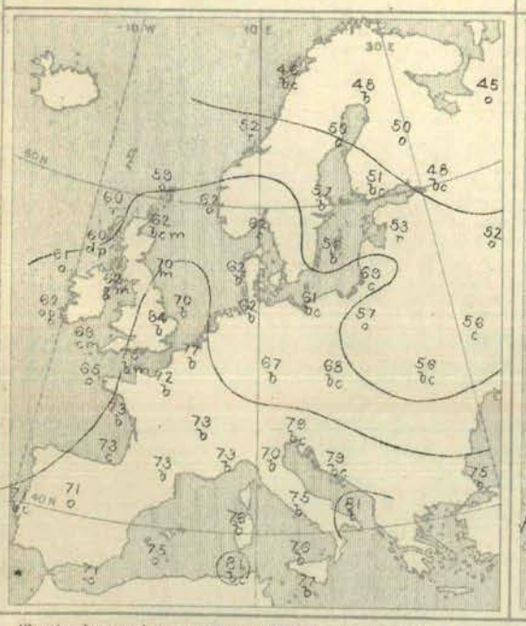
Temperature changing irregularly; increasing over France and the southern half of England. Morning readings highest, 81° at Brindisi, 84° at Barcelona, and 70° to 80° over the Mediterranean and southern Europe generally; 74° at Jersey, 72° at Hurst Castle and in London. Lowest, 47° to 51° over the most northern parts of Europe, 54° at Sumburgh Head, 58° at the Scaw, 52° to 57° over the south of Russia. Rising later to between 90° and 100° in France, Spain, Algeria, and some parts of Italy, to 92° in London, 91° at Cambridge, and 89° at Oxford and Loughborough; succeeding night very warm over England.

Wind (1) extremely light and variable over southern and south-eastern Europe; (2) South-Easterly to South-Westerly over the British Islands—moderate to fresh at the western stations, very light in the east; (3) Northerly over Scandinavia (a gale at Wisby), North-Westerly to Westerly over north Germany, South-Westerly over central Russia, Easterly over the Gulf of Finland. Shifting temporarily to the Eastward over the English Channel later, and to North-West in the west of France, but nothing decided occurring elsewhere.

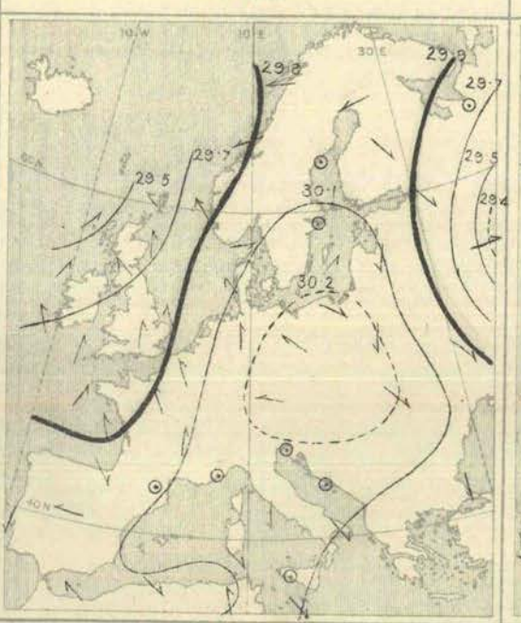
Barometer highest, 30·2 ins. in the south of Russia, and exceeding 30·1 ins. over south-eastern and southern Europe and the Mediterranean, as well as the north-west of Norway. Lowest, 29·6 ins. and less in a depression over the eastern side of the Baltic; 29·9 ins. and less over the north-western parts of Ireland and Scotland and adjacent parts of the Atlantic. Falling very irregularly in our Islands later—new depression approaching Ireland, and apparently a secondary beginning to form over Brittany.

Friday, 18th August.

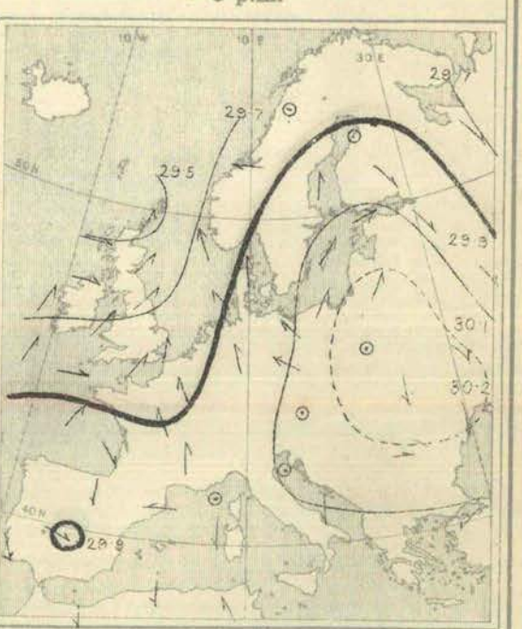
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning very fine and bright over the Baltic, central, southern, and western Europe, including the eastern half of England, cloudy in the west and north, with rain in several places, dull over Russia, with rain at Riga. Rain falling later in the west and north of the United Kingdom and at Christiansund, heavy thunderstorm at Shields, and thunder and lightning in many parts of England. Aurora seen at Wick and Roche's Point.

Temperature risen considerably over England, the Netherlands, and north-east of France—exceptionally high in London. Morning readings highest, (1) 85° at Palma, 81° at La Calle and Brindisi, and exceeding 70° over southern Europe generally; (2) 70° to 77° over the eastern half of England, the Netherlands, and north-east of France, and 84° in London. Lowest, 45° to 49° over Lapland and the north of Russia, 52° at Moscow and Christiansund, 53° at Riga; 56° to 58° over eastern Germany, Poland, and the north of Hungary. Rising later to 99° at Madrid, 96° at Paris and Besançon, 94° at Brussels, 93° in London, and to between 85° and 92° over the greater part of England and France. Decreasing decidedly over England later.

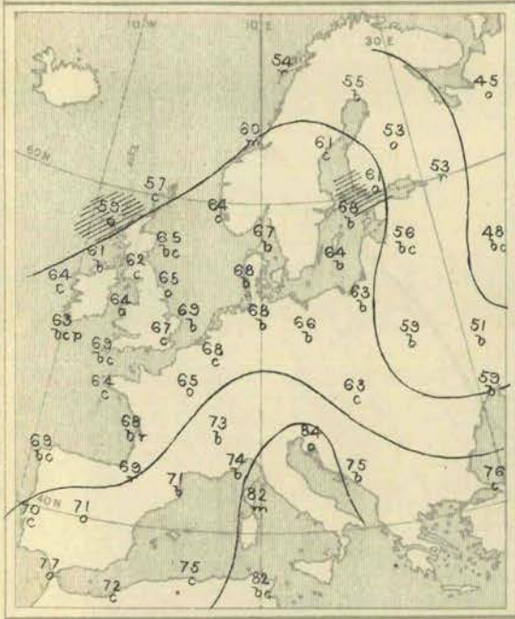
Wind (1) very light and anticyclonic over the Baltic, central, south-eastern, and southern Europe; (2) Southerly but somewhat variable over the British Isles and their neighbourhood—moderate in most places, but fresh in the north-west and at Skudesnaes; (3) Northerly and light over Finland, the Baltic Provinces, and western Russia, Westerly at Kharkov and Moscow. Varying a good deal between South and West in our Islands later—freshening over the south of England, falling light at the more northern stations.

Barometer highest, 30·2 ins. and more over Germany and Austria, and exceeding 30·0 ins. in a broad band extending from Lapland over Finland, Sweden, and the Baltic, to central, southern, and south-eastern Europe. Lowest, (1) 29·4 ins. and less in a depression over central Russia, (2) 29·5 ins. and less in another off our extreme north-west coasts; slight secondary disturbance near Scilly. Rising at our western stations later, falling over France and Germany, unsteady in the south of England.

Saturday, 19th August.

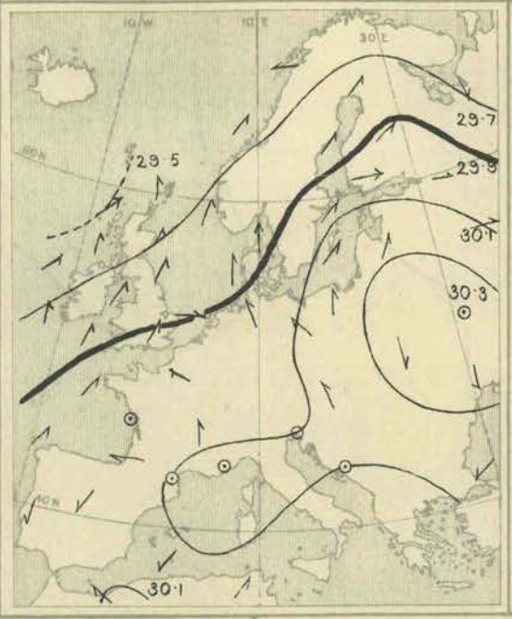
Temperature and Weather.

8 a.m.

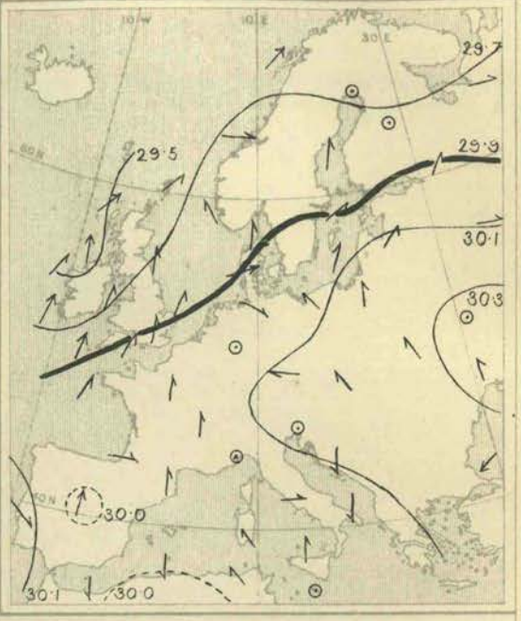


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning fine over eastern and south-eastern Europe and the Mediterranean and on our own coasts, cloudy and changeable in the west, north, and north-east as a whole, with showers at Valencia, Bodö, and St. Petersburg. Considerable rain in Ireland later, and smaller quantities over the western and northern countries generally, as well as over Belgium, the north-east of France, and extreme south-east of England; lightning in last named districts and over the North Sea.

Temperature decreased very decidedly over the south-eastern half of England, Belgium, and the north-east of France. Morning readings highest, 82° at La Calle and Sanguinaire, and exceeding 70° over southern Europe generally, lower elsewhere. Lowest, 45° at Archangel, 48° at Moscow, 49° at Uleaborg, 51° at Kharkov and Kieff, 54° at Bodö, 57° at Sumburgh Head, Breslau, and Warsaw. Failing to reach 80° over our Islands (except at Loughborough) and over the north of France during day, but touching 85° to 88° over Germany, 78° to 85° over Italy, and 90° to 96° in the south of France. Succeeding night cool over England.

Wind very light and variable over eastern and southern Europe; South-Westerly to Southerly in the north-west—moderate on our own coasts and strong on the eastern shores of the North Sea; South-Westerly over Sweden, South-Westerly to North-Westerly over Finland and the north of Russia. Increasing decidedly from the Southward at our western stations later.

Barometer highest, 30·3 ins. to 30·1 ins. in an anticyclone over eastern, south-eastern, and central Europe, and exceeding 30·0 ins. over the Baltic, France, and the Iberian Peninsula. Lowest, 29·6 ins. and less over the north-west of Scotland, the Hebrides, Shetlands, and all adjacent parts of the Atlantic. Gradients moderate over the western and northern countries, and increasing. Falling rather decidedly over Ireland later, and fall spreading eastwards, anticyclone over Russia decreasing in intensity and moving south-eastwards.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force is indicated thus: ⇛ = a heavy gale; → = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breese: and ⊘ = a calm. In the left-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Germany, Sweden, and Norway, and 7 a.m. in France, Algeria, Italy, Austria, and Russia; that for 6 p.m. is prepared from observations made at 6 p.m. in the British Islands and France, 7 p.m. in Algeria, 8 p.m. in Sweden and Norway, Germany, and Austria, and 9 p.m. in Russia, Belgium, and Italy. The time indicated in each case is the standard time for each country.

GENERAL NOTES.

During the earlier part of this week anticyclonic conditions were prevalent over the British Isles, the North Sea, and western Europe, in which regions the wind was light, the weather fine and dry, and temperature high—especially high in the west of France—where maxima varying between 90° and 100° were recorded frequently. In the meantime, depressions were appearing over northern and central Europe, Russia, and the Baltic, and in those regions a great deal of rain fell, the wind was Northerly, and temperature low.

On Wednesday, the anticyclone began to move south-eastwards, and, as light Southerly breezes spread over the British Islands, temperature rose still higher until Friday, when the thermometer stood at between 90° and 93° over our inland counties, 94° at Brussels, 95° at Lyons, and 96° at Paris.

From this time temperature declined rapidly over western Europe, so that on Saturday and Sunday the maxima over England and the north of France fell short of 80°, but the heat over central Europe increased quickly, the maxima recorded varying from 80° to 88° over Germany, and from 90° to 96° in the south of France. Showers became more general over the British Islands, while the dry weather spread to Germany and Austria.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 194.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	STATIONS	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	54·8	?	53	?	EASTBOURNE	70·3	?	70	?
OSWALDKIRK (Yorkshire)	61·3	?	60	?	TENBY	53·6*	?	53*	?
WORKSOP	49·6	+16·1	49	+16	NEWQUAY	64·0	?	64	?
THURCASTON (Leicestershire)	61·3	+25·8	60	+25	TORQUAY	71·7*	?	72*	?
MARGATE	63·3	?	63	?	ARLEY COTTAGE (County Cavan)	41·8	?	41	?
WESTBOURNE (Sussex)	79·0*	?	79*	?	GUERNSEY	82·0*	?	83*	?
BRIGHTON	74·6	?	75	?					

* The values at Westbourne, Tenby, Torquay and Guernsey are obtained by Jordan's Photographic Recorder.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; R. H. SCOTT, F.R.S., SECRETARY.

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VOL. X. No. 34.] *Third Series.* WEEK ENDING SATURDAY, 26TH AUGUST, 1893. [*Price 6d.* *Annual Subscription, post paid*, £1 10s. 0d.

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871-90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the twenty-five years 1866-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the ten years 1881-90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

DISTRICTS. (See p. 200.)	Observed during the Week.					Above or below the Mean for the Week.	Accumulated.							
							For the Week.				From January 1st, 1893.			
	Highest.	Lowest.	Averages of Daily Maxima.	Averages of Daily Minima.	Averages of Daily Mean.		Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
	°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.														
0. SCOTLAND, NORTH	69	42	61·4	50·0	55·4	1 above.	94	+15	0	0	1847	+551	485	- 37
1. SCOTLAND, EAST	72	43	64·2	50·0	56·7	1 above.	103	+ 3	0	0	2044	+355	548	- 21
2. ENGLAND, N.E.	72	49	67·2	53·5	59·9	3 above.	125	+20	0	0	2195	+413	436	- 62
3. ENGLAND, EAST	79	46	70·3	52·7	61·1	2 above.	134	+17	0	0	2578	+500	524	- 37
4. MIDLAND COUNTIES	77	41	69·6	52·1	60·3	2 above.	128	+16	0	0	2697	+635	505	- 47
5. ENGLAND, SOUTH	78	42	70·3	55·5	62·5	2 above.	144	+18	0	0	2782	+544	373	- 43
Principal Grazing, &c., Districts.														
6. SCOTLAND, WEST	68	49	62·9	52·9	57·6	1 above.	109	+13	0	0	2217	+493	354	- 63
7. ENGLAND, N.W.	70	49	65·2	55·9	60·3	2 above.	128	+20	0	0	2527*	+664	323	- 91
8. ENGLAND, S.W.	74	42	68·5	55·0	61·3	2 above.	135	+19	0	0	2745	+675	246	- 70
9. IRELAND, NORTH	71	40	63·8	51·4	57·3	1 above.	107	+ 6	0	0	2402	+553	258	-104
10. IRELAND, SOUTH	69	41	65·5	53·0	58·9	1 above.	118	+ 9	0	0	2700	+609	178	-100
—CHANNEL ISLANDS	77	56	69·9	59·4	34·3	3 above.	156	+26	0	0	3048	+768	70	- 52

Rainfall. Bright Sunshine.

DISTRICTS. (See p 200.)	Rainfall. For the Week.			Rainfall. From Jan. 1st, 1893.				Bright Sunshine. For the Week.				Bright Sunshine. From January 1st, 1893.			
	Number of Rainy Days.	Total Fall.	More or less than the mean for the Week.	No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.	Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
		10ths of in.	10ths of ins.			Ins.	Ins.								
Principal Wheat-producing Districts.															
0. SCOTLAND, NORTH	6	16	7 more.	148	- 7	26·0	- 3·0	28	+ 11	28	+10	808	- 82	25	- 3
1. SCOTLAND, EAST	6	13	5 more.	122	- 5	16·5	- 2·9	42	+ 6	41	+ 4	1048	+ 11	33	+ 1
2. ENGLAND, N.E.	5	4	2 less.	104	-12	13·1	- 2·9	44	+ 16	45	+14	1170	+220	37	+ 7
3. ENGLAND, EAST	4	4	1 less.	101	-13	12·4	- 3·4	48	+ 9	48	+ 6	1398	+255	44	+ 8
4. MIDLAND COUNTIES	3	4	2 less.	100	-12	12·5	- 5·1	56	+ 20	57	+20	1320	+298	42	+ 10
5. ENGLAND, SOUTH	4	5	1 less.	95	-14	12·3	- 4·2	51	+ 8	52	+ 8	1450	+345	46	+ 11
Principal Grazing, &c., Districts.															
6. SCOTLAND, WEST	5	15	6 more.	119	-15	22·9	- 7·1	48	+ 14	49	+16	1177	+149	37	+ 4
7. ENGLAND, N.W.	5	7	0 (average)	108	-14	16·8	- 3·6	46	+ 13	47	+13	1185	+166	37	+ 5
8. ENGLAND, S.W.	3	6	2 less.	99	-26	18·9	- 4·8	59	+ 13	61	+15	1518	+312	48	+ 9
9. IRELAND, NORTH	5	12	4 more.	120	-14	20·9	- 1·3	42	+ 14	43	+16	1027	+ 85	32	+ 2
10. IRELAND, SOUTH	5	11	3 more.	116	-16	19·9	- 4·2	48	+ 13	49	+14	1127	+ 40	36	+ 1
—CHANNEL ISLANDS	3	5	1 less.	103	-29	14·1	- 4·8	55	0	56	0	1788	+378	57	+ 12

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather during all the earlier part of this period was very unsettled in the western and northern parts of the Kingdom, and rain fell daily; in the more southern and eastern districts the conditions were generally fair and dry, although slight rain was experienced during the earlier part of the time.

Temperature continued to decrease and was much lower than that of the preceding week, but was still above the mean, the excess ranging from 1° in Ireland and Scotland, to 3° in England N.E. and the Channel Islands. The highest of the maxima were recorded on the 20th, when they ranged from 79° in England E. and 78° in England S., to 69° in Scotland N. and Ireland S., and to 68° in Scotland W. The lowest of the minima were registered during the middle part of the week in Scotland, but at the end of the week in most parts of England and Ireland; they were much lower than any recorded of late, ranging from 40° to 41° in Ireland, from 42° to 49° in Scotland, and from 41° to 49° in England. In the Channel Islands, however, the thermometer did not fall below 56°.

Rainfall exceeded the mean in Ireland and Scotland, and just equalled it in England N.W.; in all other districts the fall was slightly less than the normal.

Bright Sunshine again exceeded the mean, the percentage of the possible duration ranging from 61 in England S.W., 57 in the Midland Counties, and 56 in the Channel Islands, to 41 in Scotland E., and to 28 in Scotland N.

Barometer and Wind.—During the earlier part of the week depressions moved from south-west to north-east outside, or over our extreme western and northern coasts; that observed on the 21st was deep and complex, and caused strong South-Westerly to Westerly gales in many parts of Scotland and Ireland. During the latter part of the time, however, the barometer rose, the conditions over our Islands gradually became anticyclonic, and light winds from North-West or North set in.

* This value has been altered owing to the receipt of further information for a preceding week.

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213 70 8|93 1896

II.—DATA from which the SUMMARY on page 199 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		*	*	*	*	*	*				Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	62	46	58·7	49·3	53·7	+ 1·1	82	0	6	0·74	0·00	*	*	*	*
	Stornoway	63	42	60·0	50·1	54·8	+ 1·4	90	0	6	1·52	+0·67	38·0	+11·2	37	+10
	Wick	60	42	63·1	49·4	55·8	+ 2·1	97	0	6	0·53	−0·07	*	*	*	*
	Lairg Ⓢ	69	42	63·3	48·4	55·4	+ 1·5	94	0	7	0·88	+0·26	*	*	*	*
	Glencarron Ⓢ	65	46	60·3	49·3	54·6	+ 1·1	88	0	7	2·82	+1·32	*	*	*	*
	Fort Augustus Ⓢ	67	46	63·6	51·8	57·4	+ 2·2	108	0	5	1·63	+0·93	24·8	?	25	?
	Fort William Ⓢ	65	47	61·1	51·7	56·1	+ 0·5	99	0	6	3·05	+1·73	22·2	?	22	?
1. SCOTLAND, E.	Nairn	70	45	64·3	50·1	56·8	+ 1·1	104	0	6	1·37	+0·77	*	*	*	*
	Aberdeen	68	46	63·9	51·3	57·2	+ 1·5	106	0	6	0·85	+0·19	38·6	+ 5·1	38	+ 4
	Braemar Ⓢ	65	43	60·2	48.2	53·8	+ 1·2	83	0	7	1·45	+0·60	33·7†	††	33†	††
	Ochtertyre Ⓢ	70	43	65·4	48·4	56·4	+ 0·8	101	0	4	2·32	+1·52	*	*	*	*
	Leith Ⓢ	72	49	67·1	52·1	59·2	+ 1·6	120	0	4	0·68	+0·08	*	*	*	*
	Marchmont Ⓢ	68	47	64·0	50·1	56·6	+ 1·6	102	0	6	0·83	+0·03	47·5	?	47	?
2. ENGLAND, N.E.	Alnwick Castle	67	49	64·7	52·3	58·1	+ 2·6	113	0	5	0·56	−0·14	*	*	*	*
	Durham	71	49	67·4	51·9	59·1	+ 2·1	120	0	5	0·45	−0·17	44·0	+12·0	44	+12
	Shields	69	49	66·6	52·6	59·2	+ 2·2	120	0	4	0·28	−0·31	*	*	*	*
	Scarborough Ⓜ	72	50	68·0	54·5	60·9	+ 3·4	132	0	5	0·31	−0·26	*	*	*	*
	York	72	50	68·4	53·6	60·6	+ 2·4	130	0	5	0·46	−0·12	48·2	+15·6	49	+18
	Spurn Head	72	53	68·0	56·1	61·7	+ 2·8	138	0	3	0·07	−0·35	*	*	*	*
3. ENGLAND, E.	Hillington Ⓜ	76	47	70·9	51·8	60·8	+ 1·7	132	0	5	0·25	−0·33	51·4	+14·7	52	+14
	Yarmouth	74	50	69·3	55·0	61·7	+ 2·1	138	0	4	0·09	−0·37	*	*	*	*
	Geldeston	79	46	71·8	52·3	61·5	+ 2·1	137	0	4	0·28	−0·20	38·7	− 3·1	39	− 4
	Cambridge	76	49	70·9	53·1	61·5	+ 1·3	137	0	2	0·32	−0·17	51·9	+13·9	53	+13
	Rothamsted	72	46	68·6	52·6	60·1	+ 1·1	127	0	4	0·96	+0·41	48·1	?	49	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	74	48	70·0	51·1	60·0	+ 1·4	126	0	4	0·42	−0·10	*	*	*	*
	Loughborough	77	49	71·1	54·0	62·0	+ 2·4	140	0	5	0·29	−0·29	*	*	*	*
	Stamford (Ketton Hall)	76	46	72·1	52·7	61·8	+ 2·4	139	0	3	0·07	−0·48	*	*	*	*
	Cheadle Ⓜ	69	47	66·1	50·9	58·0	+ 1·6	112	0	5	0·59	−0·23	*	*	*	*
	Churchstoke Ⓜ	72	41	67·2	51·6	58·9	+ 2·0	118	0	2	0·59	−0·01	59·1	+23·1	60	+23
	Hereford Ⓜ	74	44	70·5	52·2	60·8	+ 1·2	132	0	4	0·32	−0·23	*	*	*	*
	Cirencester	72	45	69·4	50·3	59·3	+ 1·6	121	0	1	0·35	−0·33	64·3	+24·6	66	+27
	Oxford	73	46	70·3	54·0	61·7	+ 2·0	138	0	3	0·41	−0·08	56·9	+17·1	58	+17
5. ENGLAND, S.	London	78	46	71·6	54·3	62·4	+ 1·2	143	0	4	0·36	−0·14	47·4†	+12·4†	48†	+12†
	North Foreland	74	53	70·3	57·3	63·4	+ 4·0	150	0	1	0·06	?	*	*	*	*
	Strathfield Turgiss Ⓜ	75	42	71·8	52·1	61·4	+ 1·4	136	0	6	0·64	+0·16	*	*	*	*
	Dungeness	75	47	70·6	57·6	63·7	+ 2·5	152	0	2	0·05	−0·43	*	*	*	*
	Hastings (St. Leonards)	71	51	68·3	57·6	62·6	+ 1·1	144	0	3	0·35	−0·19	47·0	+ 3·1	48	+ 3
	Southampton	74	46	71·3	55·3	62·8	+ 1·9	146	0	4	0·70	+0·13	53·6	+ 9·3	55	+10
	Hurst Castle	73	48	70·1	56·6	63·0	+ 1·8	147	0	4	0·56	+0·01	*	*	*	*
	Stowell Ⓜ	72	44	68·7	53·2	60·5	+ 2·1	130	0	4	1·03	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	65	47	62·2	51·3	56·4	+ 0·4	101	0	7	2·46	+1·26	*	*	*	*
	Glasgow	67	50	62·6	53·0	57·3	+ 1·5	107	0	4	1·28	+0·43	42·8	+14·6	42	+14
	Ardrossan	65	52	63·0	54·9	58·7	+ 1·2	117	0	5	1·00	+0·18	*	*	*	*
	Glenlee Ⓢ	68	49	63·8	52·5	57·9	+ 2·6	111	0	5	1·83	+0·86	*	*	*	*
	Douglas (Isle of Man)	65	50	62·8	52·7	57·5	+ 1·2	109	0	5	0·88	+0·06	54·0	+15·5	55	+17
7. ENGLAND, N.W.	Stonyhurst	66	51	63·4	54·2	58·5	+ 1·1	116	0	5	0·65	−0 42	46·4	+13·4	47	+14
	Blackpool Ⓜ	68	56	65·9	57·9	61·7	+ 3·3	138	0	5	0·90	+0·17	46·7	+12·6	47	+13
	Manchester	70	49	66·1	53·2	59·3	+ 1·7	121	0	5	0·79	+0·02	36·6†	?	37†	?
	Liverpool Obsy. (Bidston)	69	54	65·4	57·0	61·0	+ 2·3	133	0	5	0·65	0·00	*	*	*	*
	Llandudno Ⓜ	68	52	65·7	56·7	60·9	+ 1·4	132	0	4	0·32	−0·30	55·8	+20·9	57	+23
	Holyhead	67	53	64·6	56·4	60·3	+ 1·6	128	0	3	0·92	+0·27	*	*	*	*
8. ENGLAND, S.W.	Llandovery	71	42	69·3	50·1	59·1	+ 0·6	120	0	4	0·61	−0·43	*	*	*	*
	Pembroke	66	56	64·1	58·7	61·2	+ 2·5	134	0	4	0·69	+0·05	59 0	+15·0	60	+15
	Bristol (Montpelier)	74	45	71·7	55·1	62.9	+ 3·3	146	0	3	0·74	?				
	Arlington (N. Devon)	70	47	66·9	52·3	59·2	+ 1·7	120	0	4	0·79	−0·31	*	*	*	*
	Cullompton Ⓜ	74	43	71·0	52·5	61·2	+ 2·8	134	0	2	0·49	−0·15	59·2	+18·8	60	+19
	Falmouth	70	54	68·2	56·7	62·1	+ 2·5	141	0	3	0·28	−0·54	57·4	+11·8	59	+13
	Plymouth	71	51	69·4	56·9	62·8	+ 2·1	146	0	3	0·58	−0·04	56·2	+13·0	58	+14
	Prawle Point	68	55	67·0	57·9	62·2	+ 2·8	141	0	3	0·43	−0·01	*	*	*	*
9. IRELAND, N.	Malin Head	66	51	61·4	54·3	57·6	+ 0·9	109	0	6	1·25	?	*	*	*	*
	Londonderry	70	50	64·1	52·0	57·7	+ 0·6	110	0	7	1·56	+0·69	*	*	*	*
	Edenfel (Omagh)	70	47	64·3	50·7	57·1	+ 1·0	106	0	5	1·08	+0·28	*	*	*	*
	Belmullet	65	46	62·6	50·4	56·1	− 2·6	99	0	5	0·90	?	*	*	*	*
	Markree Castle	69	41	64·1	48·4	55·8	− 0·1	97	0	6	1·12	+0·30	38·3	+10·2	39	+12
	Brookeborough	66	44	63·4	50·6	56·6	+ 1·0	102	0	5	0·81	+0·06	*	*	*	*
	Armagh	67	46	64·1	50·6	57·0	+ 0·4	105	0	4	1·30	+0·65	45·1	+18·4	46	+19
	Donaghadee	71	54	66·3	57·0	61·4	+ 4·9	136	0	5	1·31	+0·61	*	*	*	*
	Edgeworthstown	68	40	64·3	48·9	56·1	− 0·3	99	0	4	1·38	+0·63	*	*	*	*
10. IRELAND, S.	Dublin	69	48	66·4	53·6	59·6	+ 0·9	123	0	5	0·72	+0·10	60·4	+24·6	62	+26
	Parsonstown	68	41	65·3	50·4	57·4	0·0	108	0	5	1·41	+0·64	46·9	+15·0	48	+15
	Kilkenny	67	46	65·7	51·0	57·9	+ 0·1	111	0	3	1·23	+0·43	*	*	*	*
	Waterford	69	50	67·8	52·1	59·5	+ 0·7	123	0	4	0·85	−0·02	*	*	*	*
	Roche's Point	67	54	64·4	55·7	59·8	+ 0·9	125	0	5	1·35	+0·47	*	*	*	*
	Valencia	66	53	64·3	55·4	59·6	+ 0·9	123	0	6	1·28	+0·19	35·3	− 0·4	36	0
	Killarney	67	51	64·9	54·3	59·3	+ 1·2	121	0	5	1·02	?	*	*	*	*
	Foynes	69	46	65·1	51·8	58·1	+ 0·4	113	0	5	0·84	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	72	57	69·4	58·3	63·5	+ 3·2	151	0	3	0·12	−0·46	*	*	*	*
	Jersey	77	56	70·3	60·4	65·1	+ 2·7	162	0	3	0·80	+0·20	52·4	− 1·5	54	0

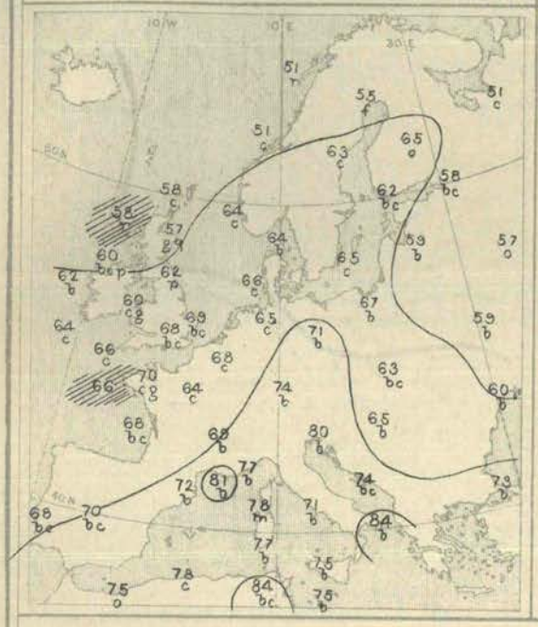
Stations marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

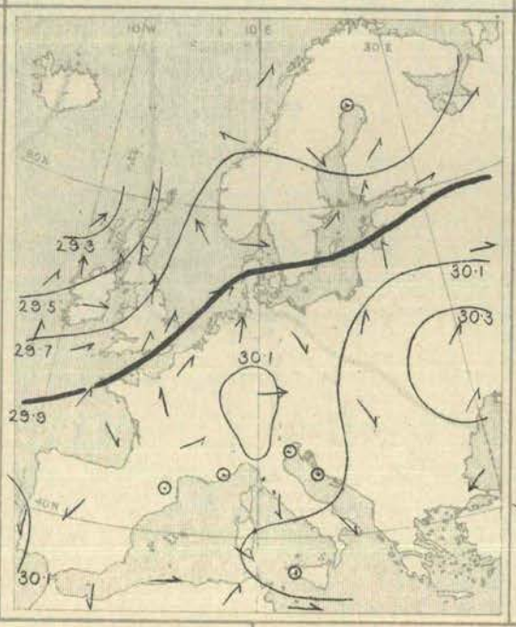
* An asterisk is inserted in all places for which the information is not usually received.

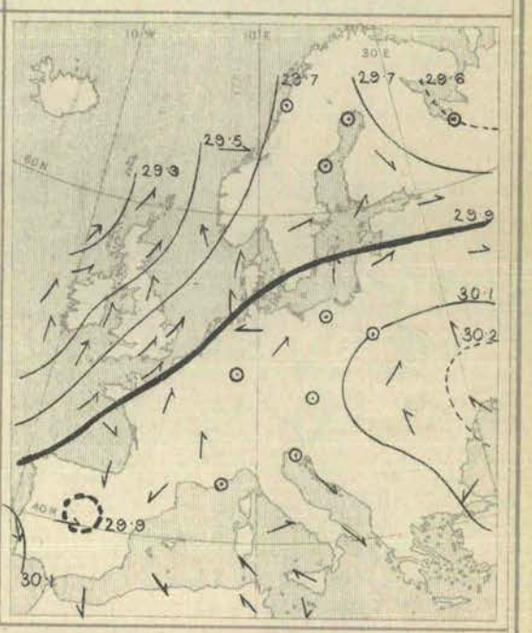
† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row) at the Kew Observatory, and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

Sunday, 20th August.

Temperature and Weather.	Barometer and Wind.	
8 a.m.	8 a.m.	6 p.m.







Weather in morning fine, bright, and quiet over eastern, central, southern, and south-western Europe and the Mediterranean; changeable over the British Islands, their neighbourhood, and northern Europe, with rain at several of the most northern stations. Rain falling later in nearly all parts of the United Kingdom, at Ushant, and over the most northern parts of the Continent, slight local showers in a few central localities—the fall heavy over Ireland; thunder and lightning in south Germany.

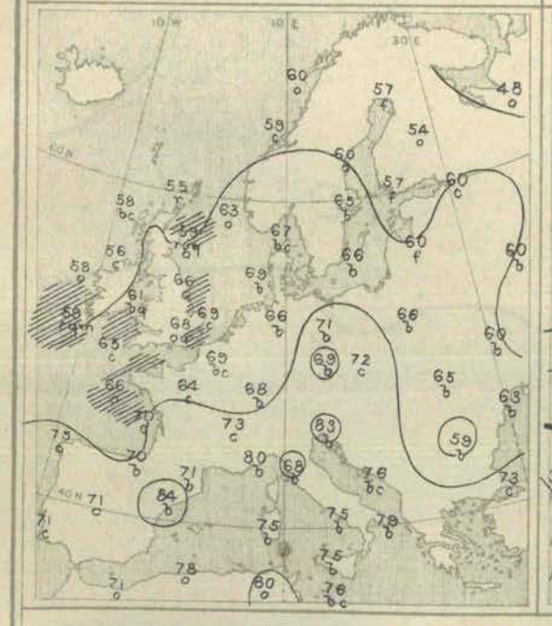
Temperature risen decidedly over Russia and central Europe and on the northern shores of the Mediterranean. Morning readings highest, 80° to 84° at several of the Mediterranean stations, and above 70° at the others, as well as at Wiesbaden and Berlin. Below 60° in the extreme north-west and north, and, lowest, 51° at Archangel and Bodö, 55° at Uleaborg, 58° at Sumburgh Head and Stornoway. Rising later to between 70° and 78° over England, to between 80° and 90° over Germany, Italy, and the south of France, to 92° at Belfort, and to 95° at Lyons and in some parts of Algeria.

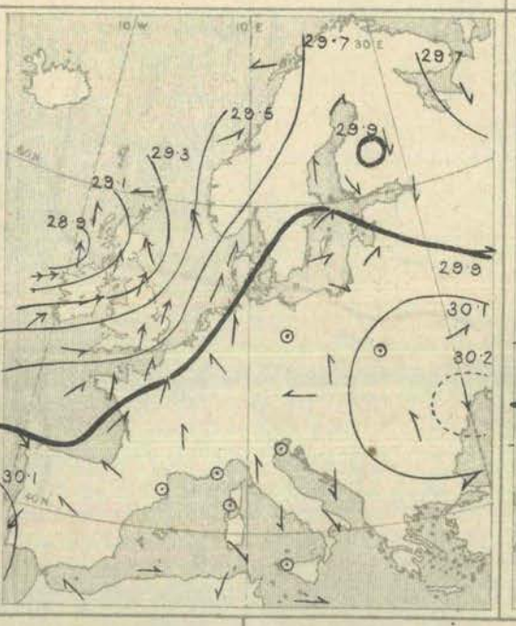
Wind very light and variable (anticyclonic) over eastern, central, and southern Europe; moderate to strong and gusty in the North-West—South-Westerly to Westerly on our western coasts, Southerly over Great Britain, South-Easterly in the west of Norway; Southerly over the Baltic also, but of little strength. Backing to South again in Ireland later; falling light over England and veering a little.

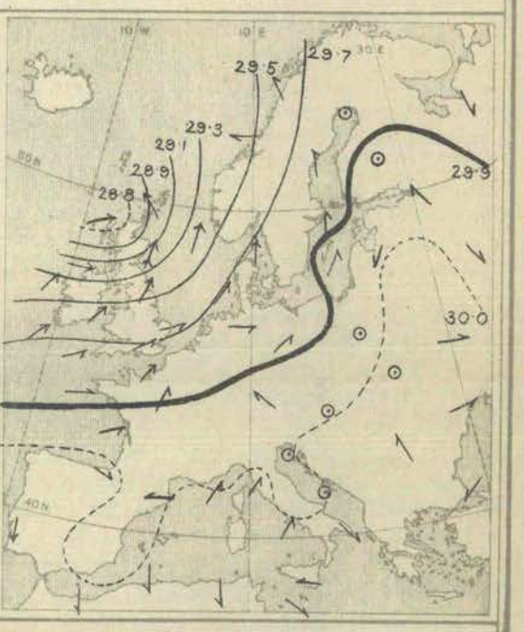
Barometer highest, 30·3 ins. and more to 30·1 ins. over all the south-eastern parts of the Continent, and exceeding 30·0 ins. over Spain, France, and Germany. Lowest, 29·3 ins. and less off the extreme north-west of Scotland, and below 29·6 ins. over the east of Lapland. Changing little and irregularly over north-western Europe during day, falling in south-east. A decided fall setting in over Ireland in afternoon.

Monday, 21st August.

Temperature and Weather.	Barometer and Wind.	
8 a.m.	8 a.m.	6 p.m.







Weather in morning fine and bright over eastern, central, and southern Europe, changeable, squally, and unsettled in the British Islands and their neighbourhood; dull and foggy in the far north. Rain later over nearly all parts of our Islands, the north of France, north Germany, and Norway—heavy at Stornoway, considerable at Malin Head, Brest, Wiesbaden, and Memel, as well as at Berne. Sky alternately clear and cloudy in most places.

Temperature fallen somewhat over the Mediterranean, changed little and irregularly elsewhere. Morning readings highest, 84° at Barcelona, 83° at Trieste, and 70° to 80° over southern Europe generally, 71° over north Germany. Lowest, 48° at Archangel, 54° at Kuopio, 55° at Sumburgh Head, and 56° at Malin Head. Rising later to between 70° and 77° over Sweden, Denmark, and England, to between 70° and 80° over the northern parts of France, and to between 80° and 88° over Germany, Italy, and the south of France, and to 90° and more over central Algeria; touching 93° at Lyons. Succeeding night cool over Great Britain.

Wind extremely light and variable over eastern, southern, and south-western Europe. Strong and cyclonic over the British Islands and their neighbourhood, and blowing a gale from the South-West in the west of Ireland, moderate Southerly over Scandinavia, light North-Westerly over Finland. Strong Southerly gales spreading to Scotland later, but wind veering and moderating over Ireland and England.

Barometer highest, 30·2 ins. and more to 30·1 ins. over south-eastern Europe and the Baltic, and exceeding 29·9 ins. over the south-western, southern, and central countries and the Baltic. Lowest, 28·9 ins. and less in a deep depression moving north-eastwards outside our extreme north-west coasts; gradients steep over the United Kingdom. Barometer rising later considerably over England, rapidly over Ireland, falling in Scotland and Norway; anticyclone decreasing decidedly in intensity over Russia.

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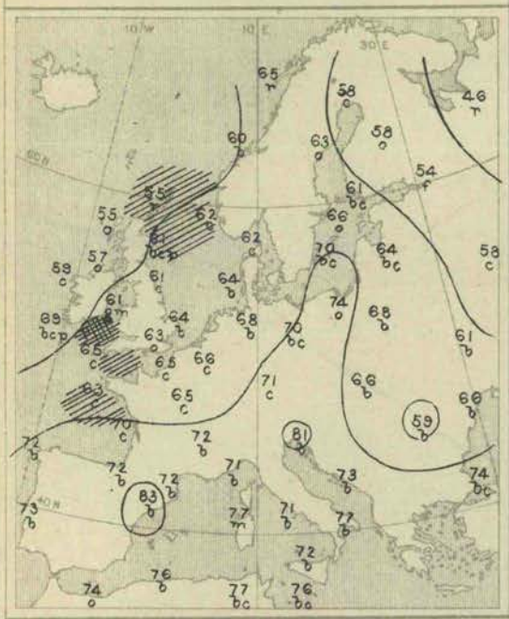
Tuesday, 22nd August.

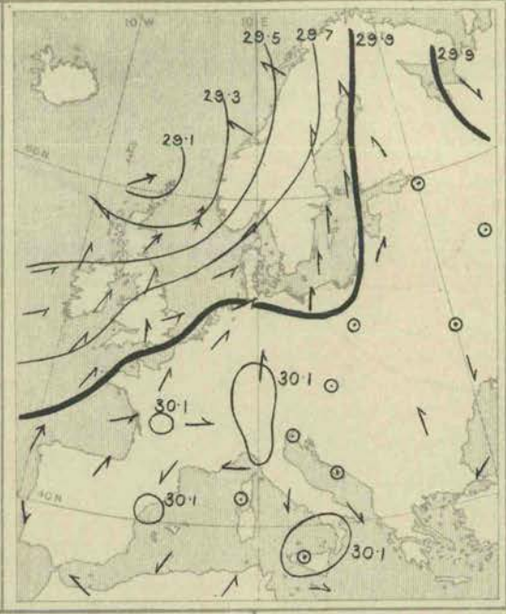
Temperature and Weather.

8 a.m.

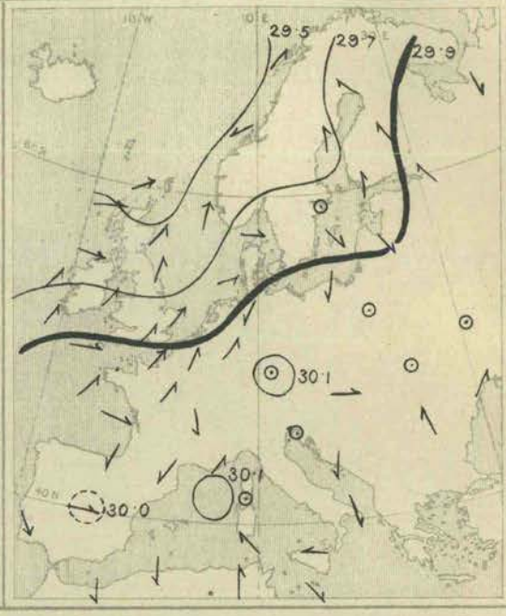


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning fine and bright over all the south-western, southern, and south-eastern countries of Europe, as well over Denmark; cloudy and very changeable in the north-west and north, with rain at Archangel, Bodö, Sumburgh Head, and several parts of the British Islands. Showers falling later over the British Islands generally, considerable quantities of rain over Brittany and the Channel Islands, and very heavy falls at Neufahrwasser and Uleaborg; thunderstorms at Spurn Head, Fanö, and Lyons.

Temperature decreasing over north-western Europe. Morning readings still exceeding 70° at the most southern of the Continental stations—81° at Trieste, 83° at Barcelona; lowest, (1) 46° at Archangel, 54° at St. Petersburg, 58° at Kuopio and Moscow; (2) 55° at Sumburgh Head and Stornoway, 57° at Malin Head, 59° at Belmullet, Valencia, and Roche's Point. Rising later to between 70° and 74° over England and the north of France, to 84° at Berlin, to between 80° and 88° over the south of France, Italy, and Portugal, and to 95° and more over central Algeria.

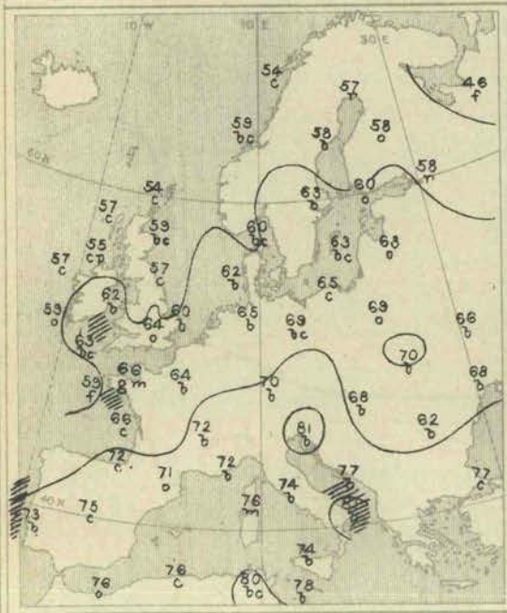
Wind moderate to strong over Great Britain and the North Sea. Mainly South-Westerly over the British Islands and North Sea, Southerly over the Baltic, South-Easterly over Lapland and Finland, but very light and variable over the southern, south-eastern, and eastern countries. Blowing strong and squally over the Channel and south of England later, no great change elsewhere.

Barometer highest, 30·0 ins. and more to 29·9 ins. over nearly the whole of the Continent—the Baltic and Scandinavia being excepted. Lowest, 29·1 ins. and less in a depression lying to the northward of Sumburgh Head, and below 29·7 ins. in a shallow secondary system off the south of Ireland. Both systems moving northwards later, and the barometer rising fast in Scotland, more gradually over England.

Wednesday, 23rd August.

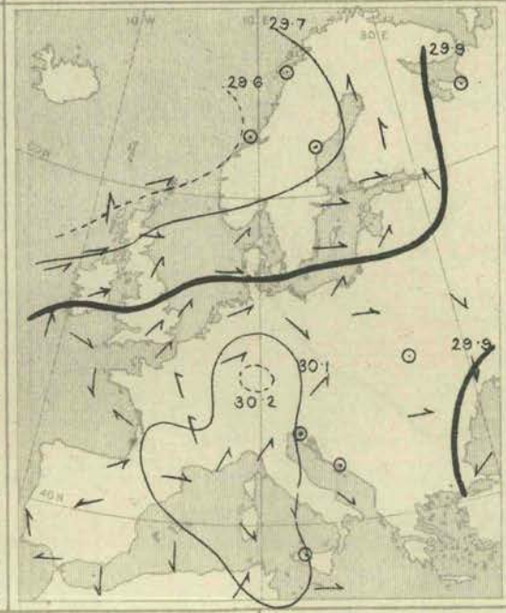
Temperature and Weather.

8 a.m.

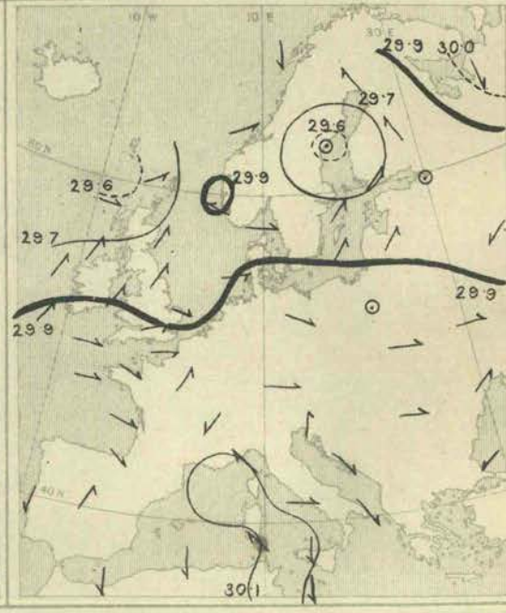


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning very fine over the Mediterranean, southern, south-eastern, and central Europe, changeable and unsettled over the more northern countries, with showers in several localities, and steady rain over part of the Channel and south of England. Last-named fall continuing for several hours later, and travelling north-eastward; passing showers falling over many parts of our Islands, near Nancy and Clermont, and over the North Sea, and heavy rain over the northern parts of Scandinavia, Finland, and Russia. Lightning or thunder at Wick, Aberdeen, Lyons, and over south Germany.

Temperature decreasing slowly and unsteadily. Morning readings highest, 80° or more at Barcelona, Trieste, Brindisi, La Calle, and Aumale, and above 70° over southern Europe generally, as well as at Prague and Cracow. Lowest, 46° at Archangel, 54° at Bodö and Sumburgh Head, 55° at Malin Head, 58° at Belmullet, Ardrossan, Hernösand, and St. Petersburg. Slightly exceeding 70° over England later, touching 81° at Berlin, 84° at Paris, and several parts of Italy, 88° at Belfort, 91° at Lisbon. Succeeding night cold over England.

Wind very light and variable over all the southern and eastern countries, moderate in the north-west and north. Mainly South-Westerly over the United Kingdom, Westerly over north Germany and the Baltic, South-Easterly, light to calm, over the extreme north of Europe. Very variable airs over the English Channel, subsequently giving way to a moderate breeze from West-South-West.

Barometer highest, 30·2 ins. and more at Munich, and exceeding 30·0 ins. over the whole of southern, central, and south-eastern Europe. Lowest, 29·6 ins. and less off the extreme north of our Islands and the west of Norway. Gradients moderate but very irregular, owing to local depressions of slight intensity over the United Kingdom and the Channel. Rising at our south-western stations later, changing little and irregularly on our other coasts, but falling to 29·6 ins. and less over central Sweden. The local depression in the south moving north-eastwards.

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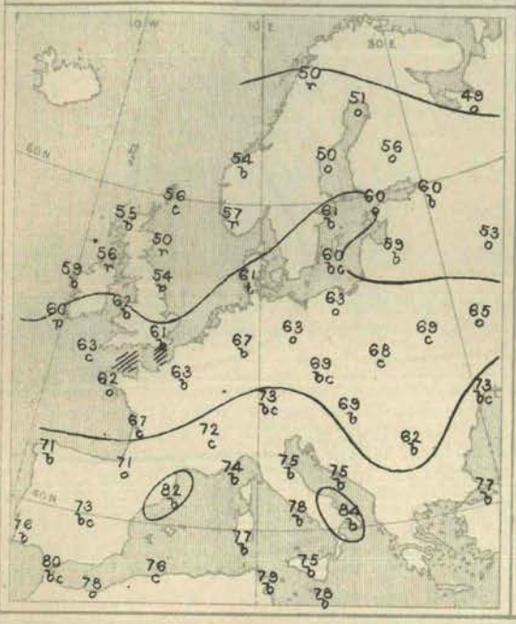
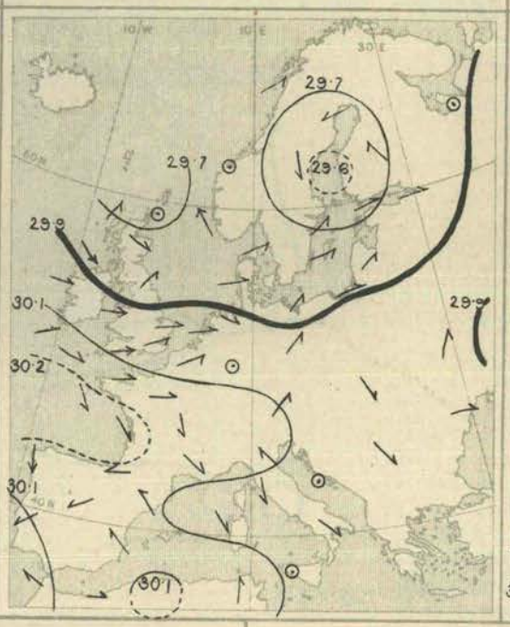
Thursday, 24th August.

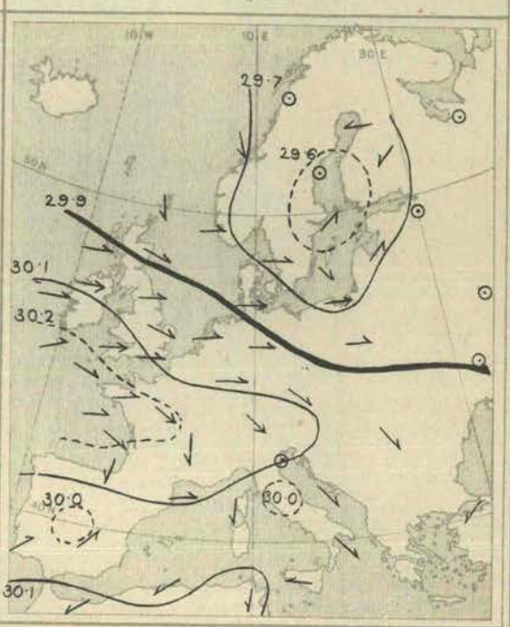
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over south-eastern and the greater part of southern and central Europe, as well as over England, cloudy and changeable over the more northern countries, with rain in a few places, and thunder at Fanö. Showers prevailing later over Germany, Denmark, and the Baltic, as well as over the northern and north-western parts of the United Kingdom, and considerable rain locally at Riga, Lemberg, and Berne; thunder on the eastern shores of the North Sea. Lunar halos seen over England.

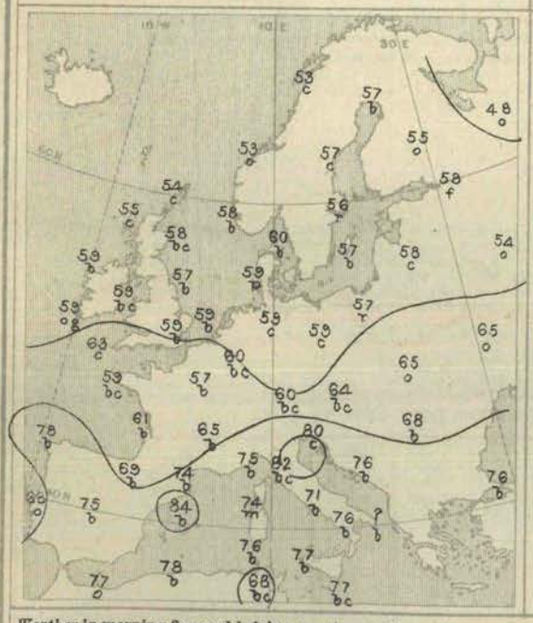
Temperature exceeding 80° at Barcelona, Trieste, and Brindisi, and exceeding 70° over southern Europe generally, as well as at Breslau; below 60° over most of the northern countries. Lowest of all, 49° at Archangel, 50° at Bodö and Aberdeen, 52° at Nairn, 54° at Shields. Rising later to between 69° and 71° over the greater part of England, to 76° at Paris, 82° at Munich, 86° at Lyons and Nice, between 85° and 90° over Italy, and 93° at Lisbon. Succeeding night very cool.

Wind continuing very light and variable over the eastern and southern countries; North-Easterly over Spain, Northerly to Westerly over France; chiefly North-Westerly to South-Westerly (and variable) over the United Kingdom, Westerly and South-Westerly over Germany and the Baltic, South-Easterly to Easterly over Finland and the northern parts of the Gulf of Bothnia and at Skudesnaes. Shifting to West and North-West on the Norwegian coast later; little change elsewhere.

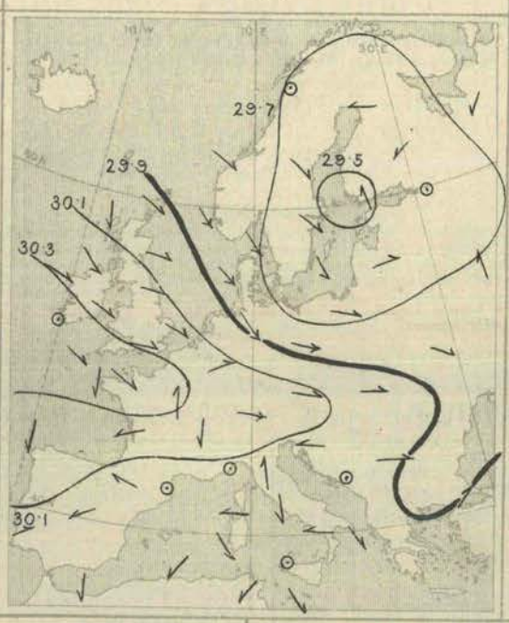
Barometer highest, 30·2 ins. and more over the Bay of Biscay and the west of France, and exceeding 30·0 ins. over the whole of south-western, southern, and south-eastern Europe. Lowest, 29·7 ins. and less off the north of Scotland, 29·6 ins. to 29·7 ins. over Sweden and the Gulf of Bothnia, and below 29·9 ins. over the south-east of Russia. Rising decidedly over the United Kingdom later. No important change elsewhere.

Friday, 25th August.

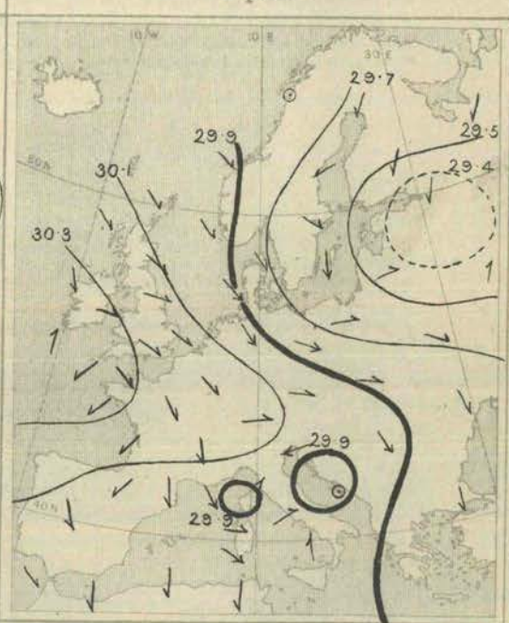
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over the southern and western parts of the Continent and the greater part of the United Kingdom, as well as in the south of Scandinavia, and over the northern shores of the Gulf of Bothnia; cloudy or overcast elsewhere, rainy over the north-east of Germany, and at Helsingfors, foggy at St. Petersburg. Considerable rain later in several parts of Scandinavia and also at Valencia (Ireland), slight showers in Scotland, the north of Ireland, and north Germany. Thunder and lightning at the Scaw and Biarritz, as well as in some parts of western Germany.

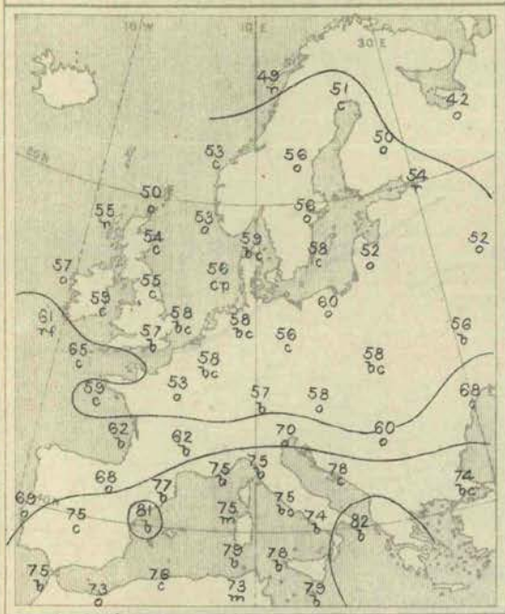
Temperature highest, 80° at Trieste and Sfax, 84° at Barcelona, and exceeding 70° over the extreme northern parts of Europe generally; below 60° over all the northern countries, but unusually uniform. Lowest, 48° at Archangel, 53° at Bodö and Christiansund, 54° at Moscow, Helsingfors, and Wick. Rising later to between 65° and 71° over the greater part of England, to 74° at Dungeness and Paris, and to between 84° and 86° in the south of France. Exceeding 90° in Spain and Italy, the highest reading of all being 104° at Madrid. Succeeding night cold over central Ireland and many parts of England.

Wind (1) moderate from North-West over the United Kingdom and the Channel, and from North-East and East over the Bay of Biscay and Spain; (2) strong from North-West on the eastern shores of the North Sea and from West over north Germany and the Baltic Provinces, light from South at Moscow and at Hangö, and from the Eastward over Finland and the north of Russia; very variable over the southern countries. Southerly airs setting in over the south of Ireland later, and the North-West wind over the eastern parts of the North Sea decreasing in force; no important change occurring elsewhere.

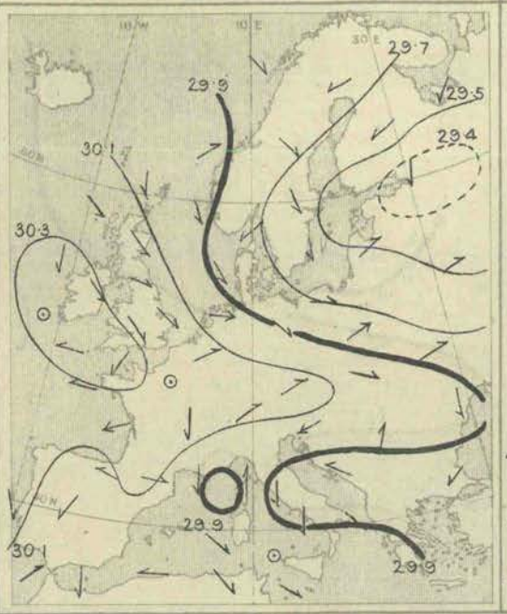
Barometer highest, 30·3 ins. and more to 30·0 ins. over the British Islands, France, Germany, the Mediterranean, and Spain. Lowest, 29·5 ins. and less to 29·6 ins. over the Baltic, Finland, and the Gulf of Bothnia, and 29·8 ins. to 29·9 ins. over the southern parts of Russia. Rising over our Islands later, falling over France and the Peninsula; shallow local disturbances appearing within the area of high pressure, as well as over the Gulf of Genoa and the northern part of the Adriatic.

Saturday, 26th August.

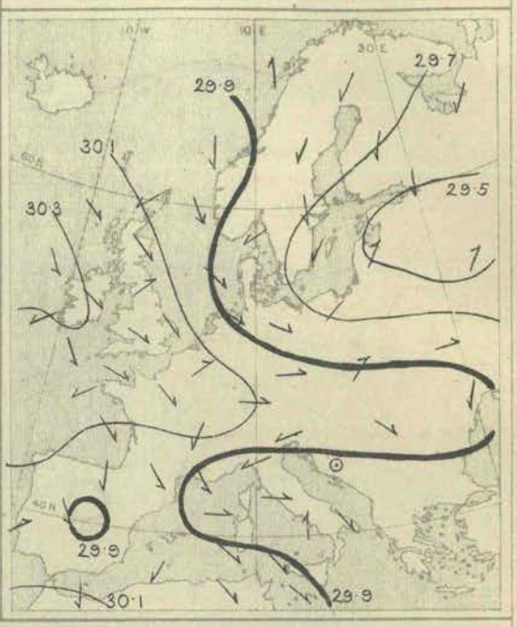
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fine over the greater part of England, as well as in Denmark, Germany, France, Spain, and Italy. Cloudy in Ireland and Scotland with rain in places; dull at most of the Scandinavian, Russian, and Austrian stations, with rain at Bodö, St. Petersburg, and Memel. Slight rain falling later in the east of England, and larger amounts in Scandinavia, Germany, and central Russia.

Temperature fallen in most countries. Morning readings highest, 82° at Brindisi, 81° at Barcelona, 79° at Cagliari and Malta, and 78° at Toulon, Lesina, and Palermo; above 70° in nearly all parts of southern Europe. Lowest, 42° at Archangel, 49° at Bodö, and 50° at Uleaborg, Kuopio, and Sumburgh Head; below 55° over the northern parts of Scotland generally, as well as in some parts of central England. Daily maxima below 60° in the north of Scotland, and below 65° at all but our extreme southern and south-western stations. Thermometer exceeding 75° in most parts of France and southern Europe, and exceeding 90° at several of the Spanish and Italian stations, the highest reading of all being 104° at Madrid.

Wind light to moderate from the Westward or North-Westward over the northern and eastern parts of the United Kingdom, as well as in Denmark, Germany, and the greater part of Scandinavia. North-Easterly in the north of Russia; Westerly or South-Westerly in the south of that country. Easterly over the extreme south-west of our Islands, the west of France, and the greater part of Italy. Subsequently shifting to the Northward in the west of France; no important change occurring elsewhere.

Barometer highest, 30·2 ins. to 30·4 ins. in an anticyclone lying over our Islands, Belgium, western Germany, and the northern parts of France. Lowest, 29·4 ins. and less in a well-marked depression lying over the northern parts of Russia. Anticyclone subsequently moving slowly westwards towards the Atlantic; depression moving eastwards and partially filling up. Small shallow disturbance appearing over Spain in evening.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force is indicated thus: ⇛ = a heavy gale; → = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze: and ⊙ = a calm. In the left-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Germany, Sweden, and Norway, and 7 a.m. in France, Algeria, Italy, Austria, and Russia; that for 6 p.m. is prepared from observations made at 6 p.m. in the British Islands and France, 7 p.m. in Algeria, 8 p.m. in Sweden and Norway, Germany, and Austria, and 9 p.m. in Russia, Belgium, and Italy. The time indicated in each case is the standard time for each country.

GENERAL NOTES.

During the earlier part of this week, high-pressures, high temperatures, and fine weather prevailed over all the southern countries of Europe, while in the north-west pressure was low (very low on the 21st), the wind South-Westerly to Southerly, strong to a gale in force, the weather cloudy, unsettled, and in most places rainy. As the week advanced, however, pressure increased in the north and west and decreased in the south-east and east; temperature fell generally, the wind veered steadily, and by Friday anticyclonic conditions were spreading over the United Kingdom and western Europe from the Atlantic with fair weather, while depressions were found over Russia and south-eastern Europe. North-Easterly to North-Westerly breezes became prevalent over the northern and western countries, while Westerly winds were felt over central Europe, and South-Westerly over the southern half of Russia. On Saturday morning the thermometric readings were below 60° except on our own south-west coasts, and over south-western, southern, and south-eastern Europe.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 200.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	47·8	?	47	?	EASTBOURNE	49·8	?	51	?
OSWALDKIRK (Yorkshire)	40·8	?	41	?	TENBY	61·3*	?	63*	?
WORKSOP	47·3	+15·7	48	+16	NEWQUAY	58·8	?	61	?
THURCASTON (Leicestershire)	53·3	+19·8	54	+20	TORQUAY	62·9*	?	65*	?
MARGATE	48·1	?	49	?	ARLEY COTTAGE (County Cavan)	43·0	?	43	?
WESTBOURNE (Sussex)	49·8*	?	51*	?	GUERNSEY	58·4*	?	60*	?
BRIGHTON	59·9	?	61	?					

* The values at Westbourne, Tenby, Torquay and Guernsey are obtained by Jordan's Photographic Recorder.

Judd & Co LM, 11th 63, Canter Lane

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; R. H. SCOTT, F.R.S., SECRETARY.

By whom Subscriptions, payable in advance, can be received.

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VOL. X. No. 35.] *Third Series.* WEEK ENDING SATURDAY, 2ND SEPTEMBER, 1893. [*Price 6d.* *Annual Subscription, post paid*, £1 10*s.* 0*d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871-90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the twenty-five years 1866-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the ten years 1881-90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

	DISTRICTS. (See p. 206.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 1st, 1893. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	70	38	60·3	59·5	54·6	1 above.	88	+12	0	0	1935	+571	485	- 57
	1. SCOTLAND, EAST	76	31	64·4	49·4	56·5	2 above.	102	+ 7	0	0	2146	+374	548	- 21
	2. ENGLAND, N.E.	75	44	64·5	51·5	57·6	1 above.	109	+ 9	0	0	2304	+425	436	- 62
	3. ENGLAND, EAST	76	41	66·4	49·9	57·6	1 below.	109	- 4	0	0	2687	+500	524	- 37
	4. MIDLAND COUNTIES	77	38	67·8	49·8	58·3	1 above.	114	+ 7	0	0	2811	+647	505	- 47
	5. ENGLAND, SOUTH	75	37	68·1	51·6	59·4	0 (average)	122	0	0	0	2904	+547	373	- 43
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	68	34	63·4	51·2	56·9	2 above.	104	+12	0	0	2321	+511	354	- 63
	7. ENGLAND, N.W.	68	44	63·4	53·4	58·1	1 above.	113	+10	0	0	2640	+680	323	- 91
	8. ENGLAND, S.W.	77	38	67·6	51·4	59·0	1 above.	119	+ 7	0	0	2864	+687	246	- 70
	9. IRELAND, NORTH	69	40	63·5	51·8	57·3	1 above.	107	+ 9	0	0	2509	+570	258	-104
	10. IRELAND, SOUTH	73	42	66·4	50·4	57·9	0 (average)	111	+ 6	0	0	2811	+620	178	-100
	—CHANNEL ISLANDS	70	54	67·0	57·1	61·7	1 above.	138	+10	0	0	3186	+783	70	- 52

Rainfall.

	DISTRICTS. (See p 206.)	For the Week. Number of Rainy Days.	Total Fall.	More or less than the mean for the Week.	From Jan. 1st, 1893. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.
			10ths of in.	10ths of ins.			Ins.	Ins.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	5	6	3 less.	153	- 6	26·6	- 3·3
	1. SCOTLAND, EAST	3	3	4 less.	125	- 6	16·8	- 3·4
	2. ENGLAND, N.E.	3	2	4 less.	107	-13	13·3	- 3·3
	3. ENGLAND, EAST	3	1	4 less.	104	-14	12·5	- 3·9
	4. MIDLAND COUNTIES	2	3	3 less.	102	-14	12·8	- 5·4
	5. ENGLAND, SOUTH	2	3	3 less.	97	-15	12·6	- 4·4
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	2	2	8 less.	121	-18	23·1	- 7·8
	7. ENGLAND, N.W.	2	2	6 less.	110	-16	17·0	- 4·2
	8. ENGLAND, S.W.	2	1	7 less.	101	-28	19·0	- 5·5
	9. IRELAND, NORTH	2	1	7 less.	122	-18	21·0	- 2·0
	10. IRELAND, SOUTH	0	less than ½	8 less.	116	-20	19·9	- 5·1
	—CHANNEL ISLANDS	1	1	6 less.	104	-33	14·2	- 5·3

Bright Sunshine.

	DISTRICTS. (See p 206.)	For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 1st, 1893. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	13	- 19	13	-20	821	- 94	25	- 2
	1. SCOTLAND, EAST	30	- 4	31	- 5	1078	+ 11	33	+ 1
	2. ENGLAND, N.E.	27	- 2	29	- 4	1197	+224	36	+ 6
	3. ENGLAND, EAST	29	- 8	31	-10	1427	+250	44	+ 8
	4. MIDLAND COUNTIES	31	- 4	32	- 4	1351	+300	42	+ 9
	5. ENGLAND, SOUTH	34	- 6	36	- 5	1484	+345	46	+ 11
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	39	+ 7	40	+ 7	1216	+163	37	+ 5
	7. ENGLAND, N.W.	33	+ 5	34	+ 6	1218	+176	37	+ 5
	8. ENGLAND, S.W.	52	+ 9	55	+11	1570	+329	49	+ 11
	9. IRELAND, NORTH	21	- 9	22	- 8	1048	+ 85	32	+ 2
	10. IRELAND, SOUTH	46	+ 12	48	+13	1173	+ 59	36	+ 2
	—CHANNEL ISLANDS	61	+ 12	66	+15	1849	+400	58	+ 13

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather during this period was generally fair and dry, but some rain was experienced over Great Britain during the middle part of the week, the fall being heavy at Cheadle and Dungeness.

Temperature was 1° below the mean in England E. and just equal to it in England S. and Ireland S., but was 1° or 2° above it in all other districts. The highest of the maxima, which were registered on August 30th over England, but on irregular dates in Ireland and Scotland, ranged from 77° in the Midland Counties and England S.W., to 69° in Ireland N., and 68° in Scotland W. and England N.W. The lowest of the minima were recorded during the earlier days of the week, when they ranged from 31° in Scotland E. (at Braemar), and 34° in Scotland W., to 44° in England N.E. and N.W., and to 54° in the Channel Islands.

Rainfall was less than the mean in all districts, the deficit in nearly every case being considerable.

Bright Sunshine was much less prevalent than during the preceding week in all districts except the Channel Islands. In the "Wheat producing" districts the values were less than the mean, but in most of the "Grazing" districts they again excee led it. The percentage of the possible duration ranged from 13 in Scotland N., and 22 in Ireland N. to 40 in Scotland W., 48 in Ireland S., 55 in England S.W., and to 66 in the Channel Islands.

Barometer and Wind.—During the whole of this period the eastern part of an anticyclone lay over our south-western and western coasts, the only depressions observed over the United Kingdom being some very shallow systems which appeared in various parts of the country on the 31st. Light or moderate Northerly and North-Westerly breezes were experienced over the Kingdom generally, but in the south-east and south the wind occasionally blew from the North-Eastward.

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II.—DATA from which the SUMMARY on page 205 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°				Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head ⚓	57	44	55·7	46·9	51·0	− 1·0	63	0	6	0·47	−0·27	*	*	*	*
	Stornoway	62	49	59·3	52·3	55·6	+ 2·9	95	0	6	0·58	−0·29	7·3	−19·1	7	−20
	Wick	61	38	59·3	47·6	53·1	− 0·1	78	0	5	0·48	−0·12	*	*	*	*
	Lairg ⚓	63	38	60·7	45·2	52·5	− 0·7	74	0	5	0·45	−0·19	*	*	*	*
	Glencarron ⚓	65	48	59·6	50·8	54·9	+ 2·2	90	0	5	1·23	−0·27	*	*	*	*
	Fort Augustus ⚓	70	40	64·4	50·6	57·1	+ 2·7	106	0	3	0·21	−0·54	12·5	?	13	?
	Fort William ⚓	68	49	62·9	53·3	57·8	+ 3·1	111	0	2	0·70	−0·68	18·9	?	19	?
1. SCOTLAND, E.	Nairn	65	39	62·0	50·0	55·6	+ 0·7	95	0	4	0·40	−0·20	*	*	*	*
	Aberdeen	66	39	62·1	50·1	55·7	+ 0·9	96	0	3	0·51	−0·15	27·1	− 4·7	28	− 5
	Braemar ⚓	66	31	61·0	47·2	53·7	+ 2·0	82	0	3	0·39	−0·45	26·8†	?†	28†	?†
	Ochtertyre ⚓	76	38	69·0	48·6	58·2	+ 3·4	113	0	2	0·23	−0·57	*	*	*	*
	Leith	74	42	68·0	51·0	59·0	+ 2·4	119	0	3	0·23	−0·37	*	*	*	*
	Marchmont ⚓	72	42	64·4	49·4	56·5	+ 2·2	102	0	4	0·18	−0·62	29·0	?	33	?
2. ENGLAND, N.E.	Alnwick Castle	68	45	63·3	50·9	56·7	+ 2·1	103	0	3	0·16	−0·55	*	*	*	*
	Durham	75	44	66·4	49·5	57·4	+ 1·3	108	0	4	0·24	−0·36	25·0	− 5·1	26	− 5
	Shields	70	44	63·9	50·7	56·9	+ 0·7	104	0	3	0·22	−0·33	*	*	*	*
	Scarborough ℳ	67	50	63·7	52·3	57·7	+ 1·1	110	0	3	0·17	−0·42	*	*	*	*
	York	72	48	66·7	51·3	58·5	+ 1·3	116	0	2	0·09	−0·51	27·9	− 2·1	29	− 1
	Spurn Head	65	52	63·1	54·3	58·4	+ 0·1	115	0	2	0·12	−0·31	*	*	*	*
3. ENGLAND, E.	Hillington ℳ	75	41	66·4	48·9	57·1	− 0·9	106	0	3	0·14	−0·46	28·7	− 6·0	30	−7
	Yarmouth	66	49	64·0	52·3	57·8	− 0·9	111	0	3	0·08	−0·41	*	*	*	*
	Geldeston	71	43	66·9	48·3	57·0	− 1·6	105	0	4	0·08	−0·44	32·3	− 7·6	34	− 8
	Cambridge	76	44	68·9	49·7	58·7	− 0·5	117	0	1	0·11	−0·39	27·1	− 8·9	29	−10
	Rothamsted	73	41	65·8	50·1	57·5	− 0·4	109	0	2	0·24	−0·34	28·1	?	30	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	69	43	66·6	49·9	57·8	+ 0·1	111	0	2	0·18	−0·32	*	*	*	*
	Loughborough	75	42	69·3	49·9	59·0	+ 0·1	119	0	3	0 19	−0·41	*	*	*	*
	Stamford (Ketton Hall)	77	40	69·9	50·6	59·7	+ 1·3	124	0	2	0·34	−0·28	*	*	*	*
	Cheadle ℳ	68	46	64·3	51·0	57·3	+ 1·8	107	0	2	1·14	+0·31	*	*	*	*
	Churchstoke ℳ	72	38	66·6	47·2	56·3	+ 0·2	100	0	3	0·23	−0·41	25·2	− 8·8	26	−10
	Hereford ℳ	75	41	68·8	50·2	58·9	+ 0·7	118	0	1	0·05	−0·53	*	*	*	*
	Cirencester	72	42	68·1	49·4	58·2	+ 1·4	113	0	1	0·03	−0·65	31·5	− 5·5	33	− 4
	Oxford	75	42	69·0	50·0	58·9	0·0	118	0	2	0·10	−0·41	28·7	− 9·0	30	− 9
5. ENGLAND, S.	London	74	42	68·4	50·9	59·1	− 1·2	120	0	3	0·17	−0·33	27·2†	− 5·5†	29†	− 6†
	North Foreland	69	54	65·3	55·6	60·2	+ 1·8	127	0	3	0·53	?	*	*	*	*
	Strathfield Turgiss ℳ	75	37	70·2	48·1	58·8	− 0·3	118	0	2	0·16	−0·34	*	*	*	*
	Dungeness	71	45	68·1	52·3	59·7	− 0·8	124	0	2	0·88	+0·36	*	*	*	*
	Hastings (St. Leonards)	72	49	67·9	53·0	60·0	− 0·7	126	0	4	0·12	−0·45	39·8	− 2·0	42	− 2
	Southampton	72	46	69·9	51·4	60·1	− 0·1	127	0	1	0·03	−0·56	33·9	− 8·1	36	− 7
	Hurst Castle	70	48	69·0	52·6	60·3	− 0·2	128	0	1	0·07	−0·53	*	*	*	*
	Stowell ℳ	69	44	66·1	48·8	56·9	− 0·6	104	0	1	0·09	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	63	42	60·4	52·9	56·4	+ 1·1	101	0	4	0·52	−0·76	*	*	*	*
	Glasgow	68	42	64·0	50·1	56·6	+ 1·7	102	0	2	0·14	−0·73	33·8	+ 7·1	35	+ 7
	Ardrossan	66	43	63·7	53·1	58·1	+ 1·4	113	0	1	0·16	−0·66	*	*	*	*
	Glenlee ⚓	68	34	65·1	47·6	55·8	+ 1·4	97	0	1	0·15	−0·85	*	*	*	*
	Douglas (Isle of Man)	67	44	64·0	52·3	57·8	+ 2·1	111	0	1	0·11	−0·73	43·3	+ 7·3	45	+ 7
7. ENGLAND, N.W.	Stonyhurst	67	44	63·5	50·7	56·7	+ 0·2	103	0	2	0·23	−0 85	38·2	+ 6·2	40	+ 6
	Blackpool ℳ	65	46	63·6	54·4	58·7	+ 1·3	117	0	2	0·39	−0·43	38·3	+ 5·7	40	+ 6
	Manchester	68	45	64·5	50·6	57·1	+ 0·1	106	0	2	0·10	−0·70	21·5†	?	23†	?
	Liverpool Obsy. (Bidston)	64	48	62·7	55·0	58·6	+ 0·3	116	0	1	0·34	−0·32	*	*	*	*
	Llandudno ℳ	65	46	63·2	54·0	58·3	− 0·4	114	0	3	0·21	−0·46				
	Holyhead	67	50	63·0	55·9	59·2	+ 1·3	120	0	1	0·03	−0·65	*	*	*	*
8. ENGLAND, S.W.	Llandovery	74	38	69·4	46·1	57·4	− 0·3	108	0	3	0·08	−0·98	*	*	*	*
	Pembroke	67	52	64·1	54·9	59·2	+ 0·9	120	0	3	0·06	−0·62	59 2	+18·0	62	+19
	Bristol (Montpelier)	77	45	70·9	51·4	60·6	+ 2·0	130	0	1	0·07	?	*	*	*	*
	Arlington (N. Devon)	68	47	64·7	51·4	57·7	+ 0·9	110	0	2	0·09	−1·01	41·3	+ 3·1	44	+ 4
	Cullompton ℳ	73	42	68·7	47·4	57·7	+ 0·1	110	0	2	0·07	−0·61	58·1	+15·1	62	+17
	Falmouth	71	50	66·1	53·9	59·6	+ 0·6	123	0	0	—	−0·90	46·4	+ 5·3	49	+ 6
	Plymouth	72	48	67·9	52·7	59·8	− 0·1	125	0	2	0·05	−0·63	*	*	*	*
	Prawle Point	72	51	68·6	53·0	60·3	+ 1·5	128	0	1	0·04	−0·41				
9. IRELAND, N.	Malin Head	62	55	60·7	56·6	58·5	+ 2·7	116	0	4	0·18	?	*	*	*	*
	Londonderry	69	48	64·4	52·2	57·9	+ 1·7	111	0	4	0·20	−0·68	*	*	*	*
	Edenfel (Omagh)	67	41	63·0	50·4	56·3	+ 0·9	100	0	2	0·06	−0·74	*	*	*	*
	Belmulliet	68	51	63·6	53·0	58·0	− 0·2	112	0	1	0·01	?	*	*	*	*
	Markree Castle	68	46	63·9	51·2	57·2	+ 2·0	106	0	2	0·06	−0·75	20·5	− 5·2	21	− 5
	Brookeborough	67	40	63·8	49·0	56·0	+ 1·3	98	0	1	0·02	−0·76	*	*	*	*
	Armagh	66	43	63·8	48·1	55·5	− 0·3	95	0	2	0·05	−0·67	14·9	−10·9	16	−12
	Donaghadee	66	53	64·4	55·4	59·6	+ 3·8	123	0	2	0·09	−0·66	*	*	*	*
	Edgeworthstown	69	47	64·0	50·1	56·6	+ 1·1	102	0	2	0·05	−0·69	*	*	*	*
10. IRELAND, S.	Dublin	68	48	65·1	52·3	58·3	+ 0·6	114	0	1	0·03	−0·57	46·6	+12·2	49	+14
	Parsonstown	70	42	66·1	49·3	57·2	+ 0·7	106	0	1	0·30	−0·47	29·2	− 1·5	31	− 1
	Kilkenny	70	45	66·3	49·0	57·1	− 0·2	106	0	0	—	−0·80	*	*	*	*
	Waterford	73	44	69·1	48·6	58·2	0·0	113	0	0	—	−0·88	*	*	*	*
	Roche's Point	69	49	66·3	51·7	58·6	+ 0·3	116	0	0	—	−0·97	*	*	*	*
	Valencia	69	46	65·4	48·9	56·7	− 1·4	103	0	0	—	−1·12	61·0	+27·0	64	+29
	Killarney												*	*	*	*
	Foynes	70	51	66·3	52·7	59·1	+ 2·0	120	0	0	—	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	70	54	65·9	56·7	61·0	+ 1·3	133	0	0	—	−0·65	*	*	*	*
	Jersey	69	54	68·0	57·4	62·4	+ 0·7	143	0	2	0·18	−0·47	63·5	+12·0	68	+15

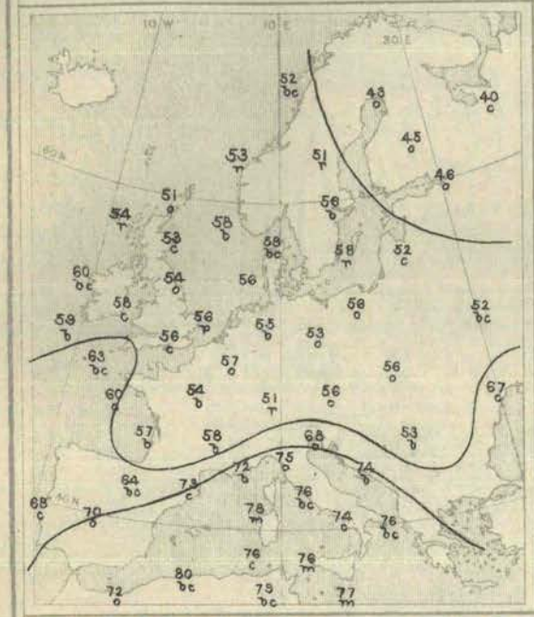
Stations marked ℳ are in connection with the Royal Meteorological Society, and those marked ⚓ with the Scottish Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

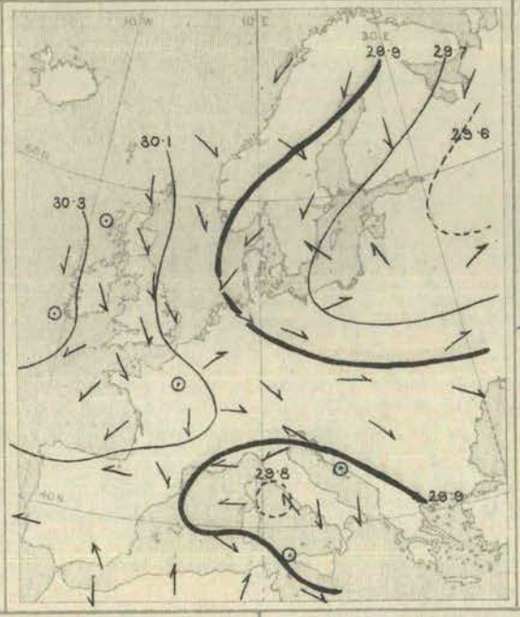
† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row) at the Kew Observatory, and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

Sunday, 27th August.

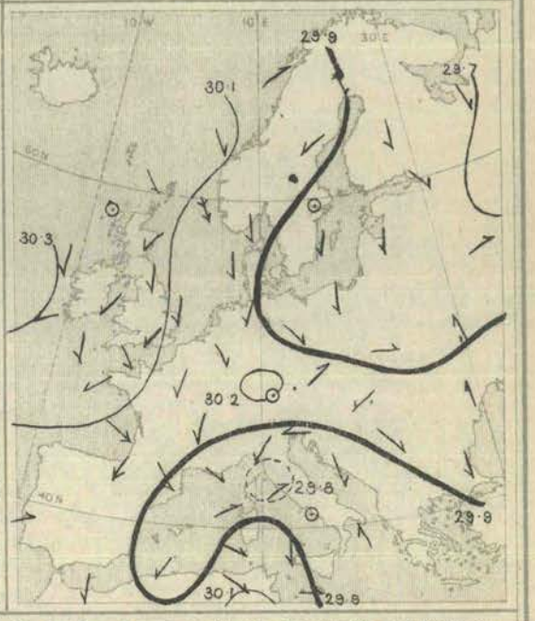
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fine and bright in the extreme south and south-west of our Islands, as well as in France, Spain, Italy, Denmark, and the south of Norway. Cloudy or overcast elsewhere, with rain at several of the German and Scandinavian stations; slight rain falling also in some parts of England. Showers experienced during day in many parts of the United Kingdom, the Netherlands, the Baltic, Russia, and Austria—amounts varying considerably in different localities.

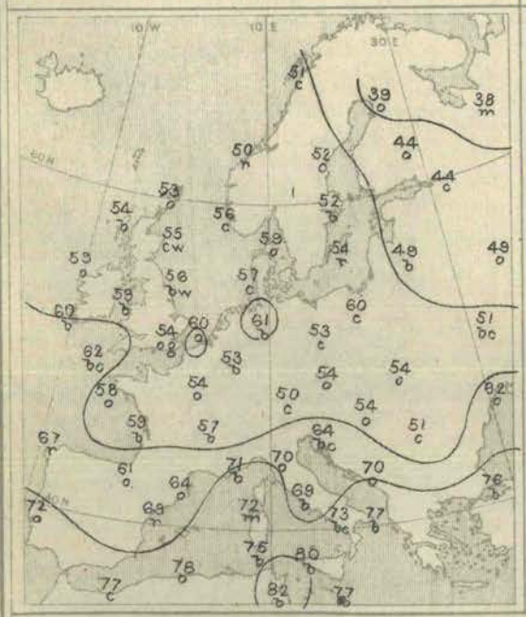
Temperature fallen generally. Morning readings highest, 80° at Algiers and Sfax, 79° at La Calle, and 78° at Sanguinaire, above 70° at most of the Mediterranean and Adriatic stations, and above 65° over the Spanish Peninsula. Lowest, 40° at Archangel, 43° at Uleaborg, 44° at Haparanda, and 46° at St. Petersburg, below 55° in several of the more northern parts of the United Kingdom, but above 60° on our extreme southern coasts. Daily maxima below 60° in the north of Scotland, and below 65° in most other parts of Great Britain. Thermometer exceeding 70° in France, and reaching 89° at Perpignan, and upwards of 90° at Palermo and over Algeria.

Wind light to moderate from the Northward over our Islands, Scandinavia, and Denmark, from the Westward in Germany and Austria, and from the South-Westward over central Russia, North-Easterly in the west of France; Easterly in Spain, variable in Italy; Southerly in Algeria. Subsequently increasing to a strong breeze from the North-Westward in the west of Norway, no important change occurring in Europe, but a rather decided anticyclonic circulation appearing over Algeria.

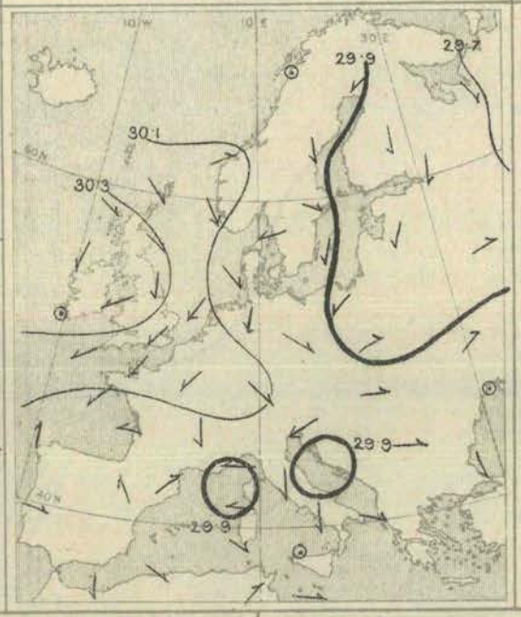
Barometer highest, 30·3 ins. and upwards in an anticyclone extending from the Atlantic over the western parts of Ireland. Lowest, 29·6 ins. to 29·7 ins. in a large depression lying over the northern and central parts of Russia; 29·8 ins. and less in a small disturbance over central Italy. No important change occurring over western Europe during day, but barometer falling over eastern Algeria.

Monday, 28th August.

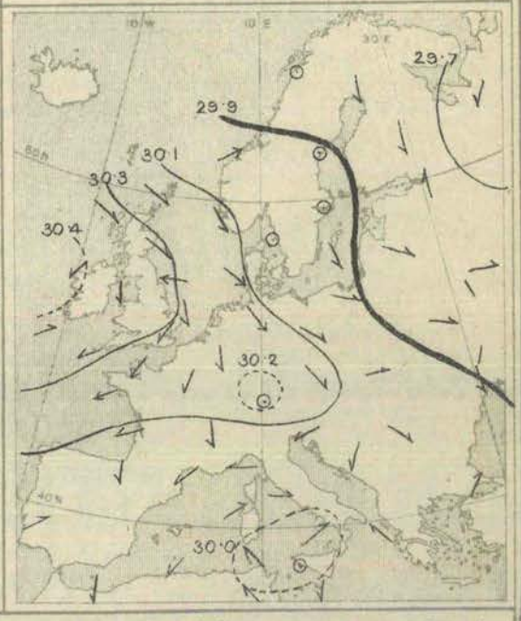
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fair over the British Islands and western Europe generally, but dull or hazy in many places, clear and bright in others; less fair over the northern and eastern countries—rainy at Christiansund, Wisby and Copenhagen. Considerable rain later over various parts of Sweden and Norway, and small quantities in the north of Scotland; slight falls in some parts of France and at Jersey, a considerable fall at Barcelona, and still larger at Nicolaieff.

Temperature in morning highest, 80° at Palermo, 82° at Sfax, and above 70° at most stations on the coasts of southern Europe; exceeding 60° at Odessa and also at Scilly and Valencia Island, much lower elsewhere. Lowest, 38° at Archangel, 39° at Uleaborg, 43° at Hangö, 44° at St. Petersburg, 50° at Christiansund and also at Munich, 51° at Kieff and Hermanstadt Rising to between 60° and 68° over the inland parts of England later, to 71° at Paris, and to between 77° and 79° on the extreme south coast of France and over the Peninsula, but touching 90° and more at Palermo and over Algeria, falling to very little above 40° at night—frost on the grass inland.

Wind light North-Westerly at the northern stations, light on our own coasts, moderate in Norway, Northerly on the Swedish coast, as well as over the North Sea and greater part of England, North-Easterly in the Channel, North-Easterly to Easterly over the Bay of Biscay; North-Westerly over north Germany, Westerly over south Germany, Austria, Hungary, and Poland. Increasing to a moderate gale from West-South-West at Christiansund later; hardly any other change.

Barometer highest, 30·3 ins. and more to 30·1 ins. over the whole of the British Isles, the north of France, Holland, and the western half of the North Sea. Lowest, 29·8 ins. and less over northern Europe, 29·9 ins. and less over the northern parts of the Mediterranean. Falling over the north of Scandinavia later, no change over the United Kingdom, and hardly any over the Continent as a whole.

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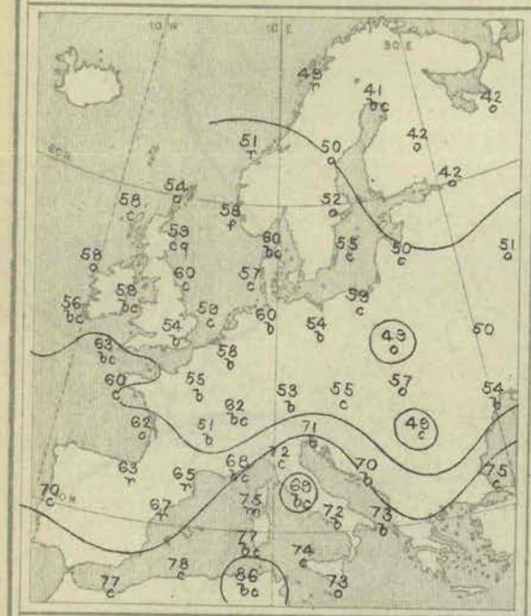
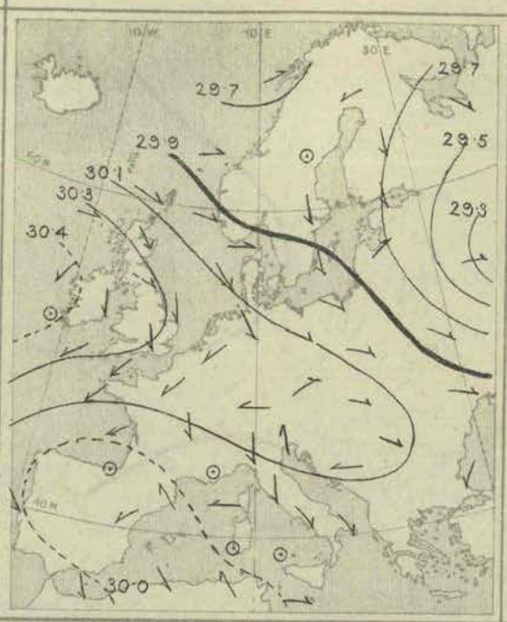
Tuesday, 29th August.

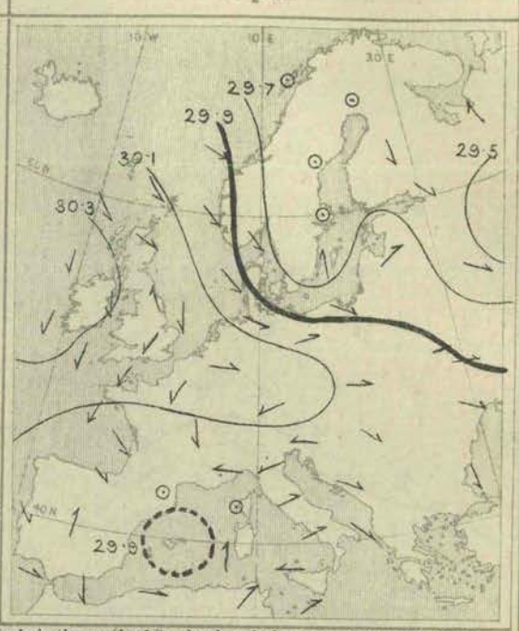
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over south-eastern Europe and the south of Italy, also in many parts of France, the south of England, and at the Welsh stations. Cloudy or overcast in most other places, with rain in the north-west of Norway. Considerable rain over Scandinavia and northern Europe later, and a little at the northern Scottish stations; slight falls in the Netherlands and very large quantities in the extreme south of France (more than 3·5 ins. at Croisette).

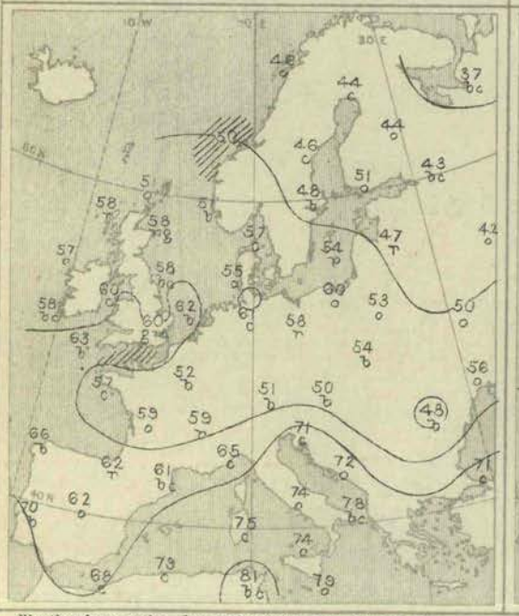
Temperature highest, 83° to 86° over Tunis, and exceeding 70° on the southern shores of the Mediterranean, the eastern shores of the Adriatic, and at Constantinople. Much lower elsewhere, below 60° over our Islands and the greater part of the Continent, and as low as 41° to 44° over Finland and the north of Russia. Rising later to between 70° and 74° over the north-east of England, the south-east of Scotland, and the north of France, and touching 73° at Rochefort, 75° at Lyons, and 79° at Nice and Lisbon; rising to 86° at Cape Béarn, 90° at Palermo, and 93° at La Calle and Aumale. Succeeding night milder than of late.

Wind varying greatly; (1) Westerly in the north of Scotland and the west of Norway, South-Westerly at Bodö; (2) Northerly over Finland and the Gulf of Bothnia, North-Westerly over the Baltic Provinces and north Germany, Westerly over Hungary and the south of Russia; (3) North-Westerly in the north of England, Northerly in the east of England, North-Easterly and fresh in the Channel, as well as over the Bay of Biscay, Easterly on the south coast of France. Becoming stronger from North-West on the Norwegian coast later, no great change elsewhere.

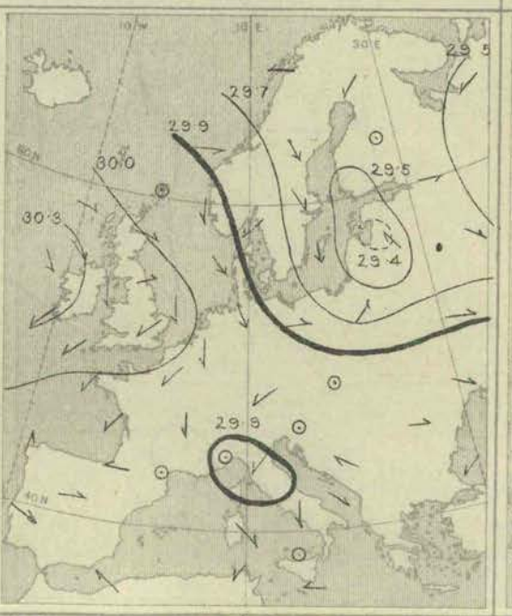
Barometer highest, 30·4 ins. and more over the west of Ireland and neighbouring parts of the Atlantic, and exceeding 30·1 ins. in a well-defined ridge extending thence across England to the Netherlands, central Europe, and Hungary. Lowest, 29·3 ins. and less in a depression over central Russia; 29·7 ins. and less in another off the coast of Finmark, and 30·0 ins. and less in a third over Spain and the south-west of France. Falling fast over Scandinavia later, and slightly but generally over our Islands, rising in Scotland and the extreme west of Norway.

Wednesday, 30th August.

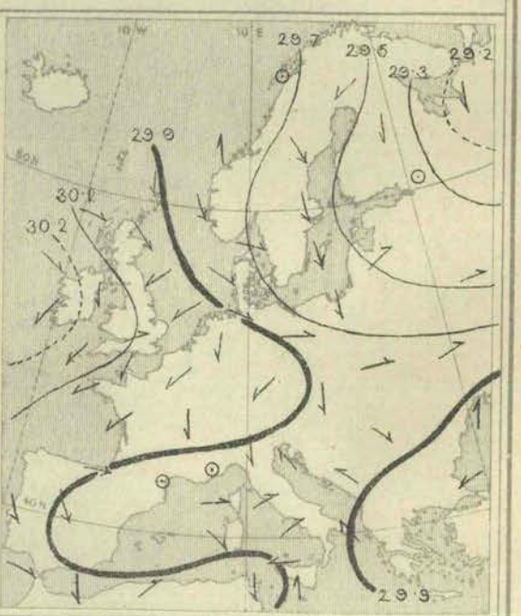
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over Austria-Hungary, south Germany, many parts of France and the British Isles, cloudy or overcast elsewhere; raining at Stornoway, Aberdeen, Riga, Biarritz, and Toulon; foggy at Brussels and some stations in England. Some rain later on all our northern coasts, as well as over the North Sea and Baltic, and a considerable further fall in the south and south-west of France, and at Lésina and Rome; thunder and lightning in the south and south-west of France.

Temperature risen somewhat over England. Morning readings highest, 80° to 82° over Tunis, and exceeding 70° on the western, southern, and eastern shores of the Mediterranean, as well as at Trieste and Constantinople. Below 60° in nearly all other parts of Europe, and, lowest of all, (1) 37° at Archangel, 42° to 45° over Finland and the north of Russia, 47° at Riga, 50° at Kieff, Kharkov, and at Christiansund, 51° at Sumburgh Head, 55° at Fanö, 56° at Wick; (2) 48° at Hermanstadt, 50° at Prague and Vienna. Rising later to between 70° and 76° in many parts of England and France, to 79° at Lisbon, to 81° at Nice, 86° in the south of Italy, and 90° and over Algeria.

Wind moderate and anticyclonic over our Islands and France, North-Westerly at our northern stations, Northerly in the west, North-Easterly in the south and over France and the Bay of Biscay; strong to a gale from the North-Westward on the eastern shores of the North Sea and in Sweden, light South-Westerly over central Europe, South-Easterly at Riga; very variable and light over the Mediterranean. Becoming very variable for an interval over our inland districts later.

Barometer highest, 30·3 ins. and more over the west of Ireland and neighbouring parts of the Atlantic, and exceeding 30·0 ins. in a "ridge" extending thence across England and the north of France to western Germany and Austria. Lowest, 29·4 ins. and less to 29·5 ins. in a complex and secondary depression on the eastern side of the Baltic, and below 29·5 ins. in a larger system over the north-east of Russia. Falling over our Islands later—and also over the Mediterranean and France.

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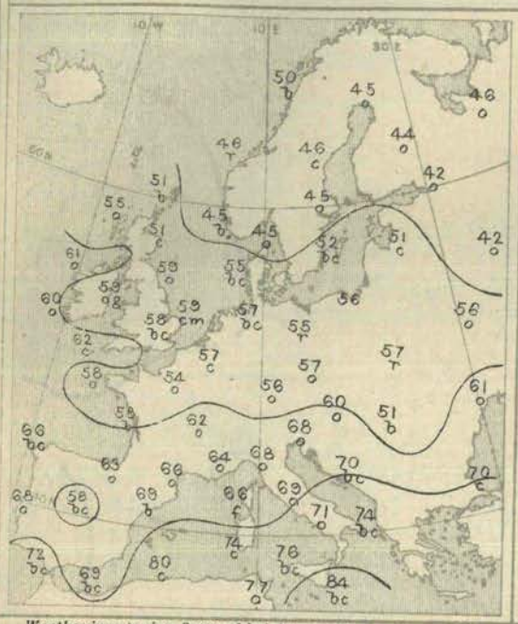
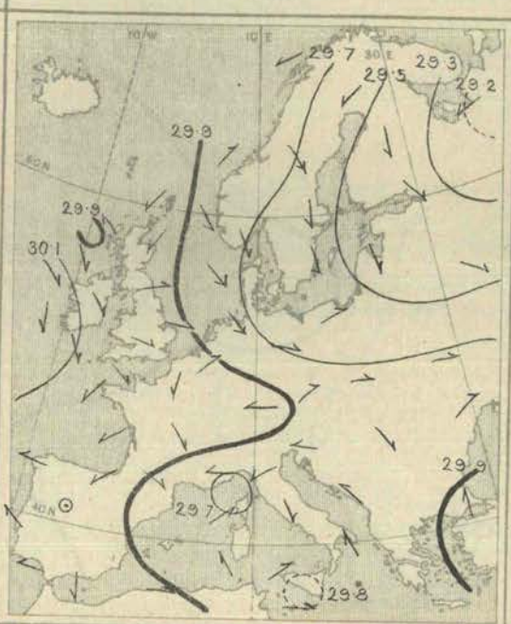
Thursday, 31st August.

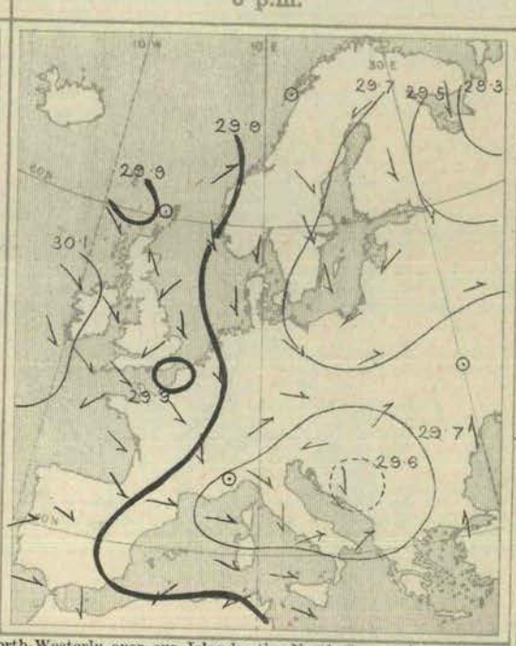
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over the southern and western parts of the Mediterranean, western and central France, and on the eastern shores of the North Sea; cloudy or overcast elsewhere, rainy at Pembroke, Christiansund, Berlin, and Lemberg, thunderstorm at Toulon. Some rain later except in the south-west of our Islands and the west of France, considerable falls in several parts of Scandinavia and at Liverpool, and in the north of France; a heavy fall at Dungeness, and still heavier falls at Sanguinaire and Monaco.

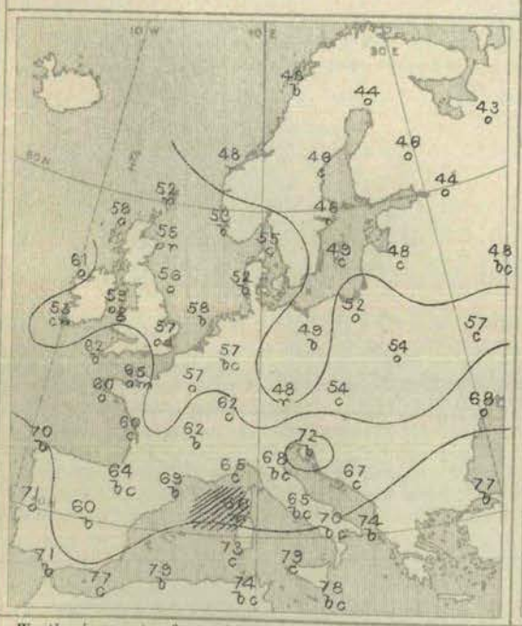
Temperature changing irregularly. Morning readings exceeding 70° over the southern and south-eastern parts of the Mediterranean only; exceeding 60° over southern Europe generally, and at several of our own stations, lower elsewhere. Below 50° over many parts of northern Europe, and as low as 42° at Moscow and St. Petersburg, 44° at Kuopio, 45° at Skudesnaes, the Scaw, and Ulleaborg. Rising later to a little above 70° at some of our southern stations, to between 75° and 77° in many parts of France, to 78° at Paris, to 80° and more in the extreme south, to 95° at Palermo.

Wind chiefly Northerly to North-Westerly over our Islands, the North Sea, and northern Europe, Westerly over Germany and the southern half of Russia—but considerable local variation observed in Scotland and at Christiansund; Northerly to North-Easterly over France, North-Easterly to Easterly on the coasts of the Peninsula, very variable over the Mediterranean and Italy. Backing to North-West in the west of France later. No decided change elsewhere.

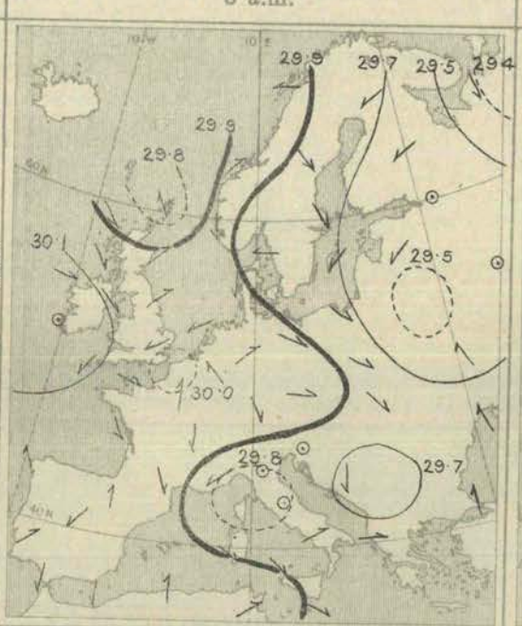
Barometer highest, 30·1 ins. and more over the south-western half of Ireland, and exceeding 29·9 ins. all over our Islands, France, Spain, and Portugal, with the Bay of Biscay. Lowest, (1) 29·2 ins. and less over the north of Russia, and 29·5 ins. to 29·6 ins. over Finland and the Baltic; (2) about 29·7 ins. in a depression over Corsica. Gradients moderate to slight and irregular. Rising over the Baltic and Scandinavia later, falling very slightly and irregularly in our Islands, and rather more decidedly in the south of France.

Friday, 1st September.

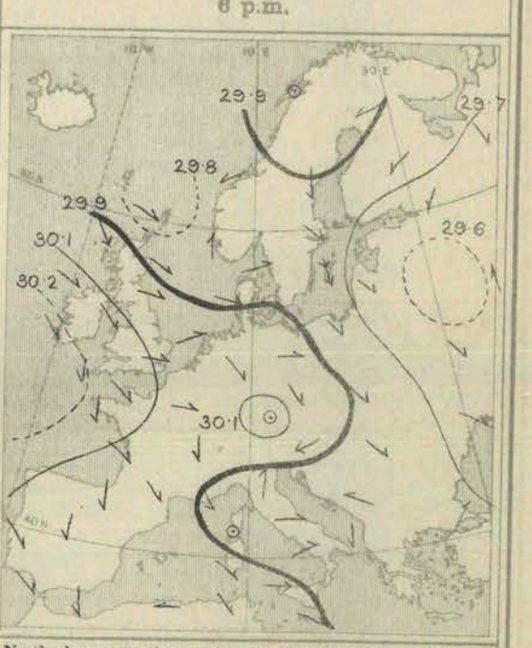
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over north Germany, France, Spain, and the greater part of the Mediterranean; dull over the more northern and north-western countries, with rain at Stockholm, Christiansund, and over many parts of the United Kingdom, as well as at Cape Gris Nez. Considerable rain at Fanö later, and in several parts of north Germany, Russia, and Austria, smaller quantities over the north of our Islands, at Yarmouth, Brussels, Paris, Munich, and a very slight sprinkling in London.

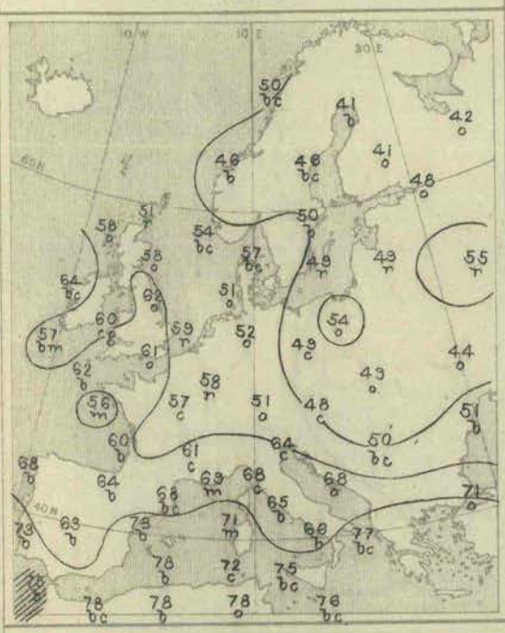
Temperature fallen over our Islands and central Europe. Morning readings exceeding 70° over the southern half of the Mediterranean (79° at Palermo and Algiers) and exceeding 60° over southern Europe generally, and in some of the western and southern parts of the United Kingdom. Lowest, 43° at Archangel and Moscow, 44° at Haparanda and St. Petersburg, 46° at Hernösand and Moscow. Rising later to between 60° and 69° over our Islands, scarcely exceeding 60° over Germany as a whole, but touching 70° at Paris, 79° at Nice, and 82° at Perpignan, 85° and more in the south of Italy, and 90° to 95° in several parts of Algeria.

Wind mainly North-Westerly or Northerly over northern and western Europe and our Islands (variable in the north-east of Scotland), Westerly to North-Westerly over central Europe, South-Easterly over the southern half of Russia. Becoming variable (but mainly from North-West or West) over England during day. Southerly in Norway, North-Westerly and Northerly in Sweden.

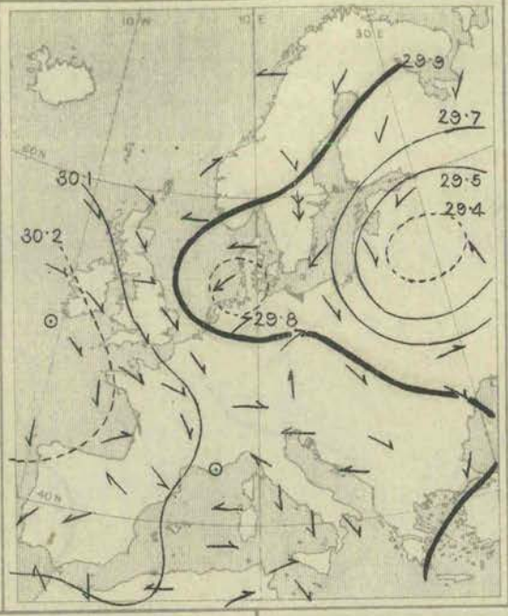
Barometer highest, 30·1 ins. and more over Ireland, the extreme south-west of England and neighbouring parts of the Atlantic. Lowest, 29·4 ins. and less over the north-east of Russia, about 29·5 ins. in a "V" stretching thence to western Russia; 29·7 ins. and less in a shallow depression over Sclavonia and the north of Turkey; 29·8 ins. and less in another over Corsica and the north of the Mediterranean, and apparently below 30·0 ins. in another approaching Corunna from the westward. Little change later.

Saturday, 2nd September.

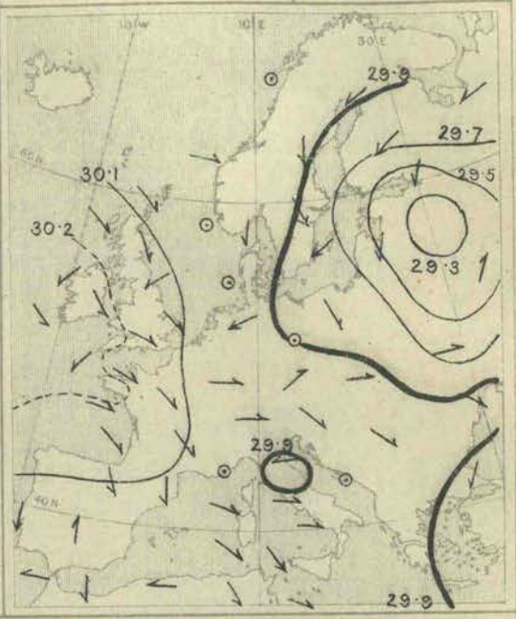
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over the Mediterranean, the Peninsula, Ireland, and at the Scandinavian stations, fair generally over France and Great Britain, but dull in places; cloudy or overcast and unsettled over Russia, with rain over the central parts, as well as over the Baltic, the Netherlands, and at Sumburgh Head. Considerable rain later over all but the western countries; slight falls at some French and English stations.

Temperature showing little change beyond a decided fall over northern and south-eastern Europe, and some slight rise over the United Kingdom. Exceeding 70° in the far south, exceeding 60° at several stations in Great Britain, but as low as 41° at Haparanda and Kuopio, 42° at Archangel, 44° at Kieff and Warsaw. Rising to slightly above 70° in many parts of Great Britain later, to 77° at Nice and Biarritz, 83° at Perpignan, 77° to 80° over Italy, 86° at Palermo, and 88° at Lisbon.

Wind North-Easterly over Finland, North-Westerly, light to moderate, over the United Kingdom, Northerly in the west of France, North-Easterly over Spain, Westerly over central Europe. Cyclonic circulation over Russia and the south-eastern shores of the North Sea. Russian circulation more definite later, that over Holstein moving Southwards and partially breaking up. Very little change in our Islands.

Barometer highest, 30·2 ins. and more over Ireland, Wales, and Cornwall, with the neighbouring parts of the Atlantic, and exceeding 30·0 ins. over Norway, the North Sea, Spain, France, and south Germany. Lowest, 29·4 ins. and less in a depression lying between St. Petersburg and Moscow, and below 29·8 ins. in a secondary over Holstein and neighbouring parts of the North Sea. Both depressions moving southwards later, and the secondary tending to fill up.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force is indicated thus: ⇛ = a heavy gale; ➔ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breese: and ⊙ = a calm. In the left-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Germany, Sweden, and Norway, and 7 a.m. in France, Algeria, Italy, Austria, and Russia; that for 6 p.m. is prepared from observations made at 6 p.m. in the British Islands and France, 7 p.m. in Algeria, 8 p.m. in Sweden and Norway, Germany, and Austria, and 9 p.m. in Russia, Belgium, and Italy. The time indicated in each case is the standard time for each country.

GENERAL NOTES.

During the week barometric pressure was highest over the Atlantic and the British Isles, whence a ridge spread south-eastwards over central and south-eastern Europe. The lowest pressures were found over Russia, and at times secondary disturbances appeared over the northern parts of the Mediterranean, Italy, and the Adriatic. The result has been that North-Westerly breezes of little strength have been prevalent over the United Kingdom, where the temperature has been about its normal value, and rainfall very deficient. Over northern and eastern Europe the thermometer has been low, and rain has fallen frequently and in considerable quantities. In the north-west of France also a good deal of rain fell at times.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 206.

Stations.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	Stations.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	35·1	?	36	?	EASTBOURNE	34·0	?	36	?
OSWALDKIRK (Yorkshire)	29·0	?	31	?	TENBY	51·0*	?	54*	?
WORKSOP	30·9	+ 0·9	33	+ 1	NEWQUAY	58·0	?	62	?
THURCASTON (Leicestershire)	36·7	+ 5·7	39	+ 6	TORQUAY	50·0*	?	53*	?
MARGATE	34·3	?	36	?	ARLEY COTTAGE (County Cavan)	27·1	?	28	?
WESTBOURNE (Sussex)	30·9*	?	33*	?	GUERNSEY	58·8*	?	63*	?
BRIGHTON	35·8	?	38	?					

* The values at Westbourne, Tenby, Torquay and Guernsey are obtained by Jordan's Photographic Recorder.

Judd & Co Ltd, Lith. 63, Carter Lane.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; R. H. SCOTT, F.R.S., SECRETARY.

By whom Subscriptions, payable in advance, can be received.

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VOL. X. No. 36.] *Third Series.* WEEK ENDING SATURDAY, 9TH SEPTEMBER, 1893. [*Price 6d.* *Annual Subscription, post paid, £1 10s. 0d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871-90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the twenty-five years 1866-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the ten years 1881-90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

DISTRICTS. (See p. 212.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 1st, 1893. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
	°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts. 0. SCOTLAND, NORTH	71	40	60·9	48·3	54·3	2 above.	86	+13	0	0	2021	+585	485	- 57
1. SCOTLAND, EAST	75	35	64·4	46·9	55·3	2 above.	93	+ 5	0	- 1	2239	+384	548	- 21
2. ENGLAND, N.E.	75	40	66·0	51·2	58·3	3 above.	114	+19	0	- 1	2418	+447	436	- 62
3. ENGLAND, EAST-	80	39	69·6	49·3	59·0	2 below.	119	+12	0	0	2806	+515	524	- 37
4. MIDLAND COUNTIES-	79	36	69·8	49·2	59·1	3 above.	120	+19	0	- 1	2931	+670	505	- 47
5. ENGLAND, SOUTH	81	42	69·8	53·1	61·0	2 above.	133	+17	0	0	3037	+568	373	- 43
Principal Grazing, &c., Districts. 6. SCOTLAND, WEST	69	40	63·2	49·5	56·0	1 above.	98	+10	0	0	2419	+523	354	- 63
7. ENGLAND, N.W.	77	43	65·7	52·8	58·8	2 above.	118	+19	0	0	2758	+703	323	- 91
8. ENGLAND, S.W.	78	43	68·3	53·2	60·4	3 above.	129	+21	0	0	2903	+714	246	- 70
9. IRELAND, NORTH	76	40	64·5	50·5	57·1	2 above.	106	+12	0	0	2615	+585	258	-104
10. IRELAND, SOUTH	72	41	66·4	52·0	58·9	2 above.	118	+17	0	0	2929	+639	178	-100
—CHANNEL ISLANDS	77	54	69·7	59·0	34·1	4 above.	155	+31	0	0	3341	+820	70	- 52

Rainfall. Bright Sunshine.

DISTRICTS. (See p 212.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the mean for the Week.	From Jan. 1st, 1893. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 1st, 1893. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
		10ths of in.	10ths of ins.			Ins.	Ins.								
Principal Wheat-producing Districts. 0. SCOTLAND, NORTH	5	10	0 (average)	158	- 6	27·6	- 3·2	28	+ 4	30	+ 4	849	- 95	25	- 3
1. SCOTLAND, EAST	3	4	4 less.	128	- 7	17·2	- 3·7	39	+ 15	42	+15	1117	+ 16	33	+ 1
2. ENGLAND, N.E.	3	4	2 less.	110	-14	13·7	- 3·5	41	+ 15	44	+16	1238	+237	37	+ 7
3. ENGLAND, EAST-	3	2	4 less.	107	-15	12·7	- 4·3	47	+ 12	52	+12	1474	+266	44	+ 8
4. MIDLAND COUNTIES-	3	4	2 less.	105	-15	13·2	- 5·7	43	+ 10	47	+13	1394	+315	42	+ 10
5. ENGLAND, SOUTH	3	3	2 less.	100	-16	12·9	- 4·7	48	+ 12	53	+15	1532	+361	46	+ 11
Principal Grazing, &c., Districts. 6. SCOTLAND, WEST	4	6	4 less.	125	-17	23·7	- 8·3	44	+ 13	48	+16	1260	+175	37	+ 5
7. ENGLAND, N.W.	4	7	1 less.	114	-16	17·7	- 4·3	38	+ 8	41	+10	1256	+185	37	+ 5
8. ENGLAND, S.W.	3	6	2 less.	104	-29	19·6	- 5·8	56	+ 14	62	+18	1626	+351	49	+ 11
9. IRELAND, NORTH	4	7	1 less.	126	-18	21·7	- 2·1	28	+ 4	30	+ 6	1076	+ 89	32	+ 3
10. IRELAND, SOUTH	3	5	3 less.	119	-22	20·4	- 5·4	42	+ 10	46	+12	1215	+ 70	36	+ 2
—CHANNEL ISLANDS	4	8	1 more.	108	-32	15·0	- 5·2	66	+ 16	73	+19	1915	+427	58	+ 13

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather was very fine and dry during the earlier part of the week, but subsequently it became rather unsettled, with occasional rain. Thunderstorms were experienced in most parts of Great Britain on Friday, the accompanying rainfall being heavy in some districts.

Temperature was above the mean, the excess ranging from 1° in Scotland W., to 3° in England N.E., the Midland Counties, and England S.W., and to 4° in the Channel Islands. The highest of the maxima, which were recorded either on the 3rd or 4th in Ireland, on the 5th in Scotland, and on the 6th in most parts of England, varied from 81° in England S., and 80° in England E., to 72° in Ireland S., and to 71° in Scotland N. The lowest of the minima were registered, as a rule, either at the beginning or end of the week, and ranged from 35° in Scotland E., and 36° in the Midland Counties, to 43° in England N.W. and S.W., and to 54° in the Channel Islands. At some of the inland stations ground frost was experienced.

Rainfall slightly exceeded the mean in the Channel Islands, and just equalled it in Scotland N., but in all other districts there was again a deficit.

Bright Sunshine was very prevalent, and exceeded the mean in all parts of the Kingdom. The percentage of the possible duration ranged from 73 in the Channel Islands to 62 in England S.W., and to between 41 and 53 in most other districts. In Scotland N. and Ireland N., however, the percentage was only 30.

Barometer and Wind.—During the two first days of the week the distribution of pressure over our Islands was anticyclonic and the winds light—chiefly from the Eastward in the south, and from the Southward in the west and north-west. By the 5th, however, the anticyclone had moved south-eastwards to Germany, and South-Westerly to Westerly winds had set in over nearly the whole of the United Kingdom. Towards the end of the week some depressions (subsidiary to larger systems further northward) passed over our Islands in an easterly or south-easterly direction, causing the wind to increase in force and to veer to the North-Westward with a considerable fall of temperature.

607 1|90 J. & Co., Ltd.
213 70 9|93 1896

II.—DATA from which the SUMMARY on page 211 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°				Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	60	41	57·0	48·7	52·7	+ 1·3	75	0	6	0·42	−0·33	*	*	*	*
	Stornoway	66	42	60·0	49·6	54·6	+ 2·6	88	0	6	1·35	+0·45	29·6	+ 3·8	31	+ 4
	Wick	70	41	60·9	47·3	53·8	+ 1·3	83	0	5	0·81	+0·21	*	*	*	*
	Lairg Ⓢ												*	*	*	*
	Glencarron Ⓢ	70	40	61·5	47·5	54·2	+ 2·3	85	0	5	1·65	+0·13	*	*	*	*
	Fort Augustus Ⓢ	71	42	63·8	47·3	55·2	+ 1·6	92	0	4	0·92	+0·12	25·0	?	27	?
	Fort William Ⓢ	67	42	62·1	49·4	55·5	+ 1·4	95	0	4	0·98	−0·47	30·1	?	32	?
1. SCOTLAND, E.	Nairn	71	41	63·1	46·4	54·3	+ 0·2	86	0	4	0·78	+0·18	*	*	*	*
	Aberdeen	70	43	63·3	48·0	55·3	+ 1·3	93	0	4	0·59	−0·08	44·7	+14·9	48	+16
	Braemar Ⓢ	72	38	61·0	44·5	52·4	+ 1·8	73	0	4	0·36	−0·45	38·6†	?†	41†	?†
	Ochtertyre Ⓢ	75	35	67·9	45·3	56·1	+ 2·0	99	0	2	0·15	−0·69	*	*	*	*
	Leith	73	43	66·6	49·7	57·7	+ 1·8	110	0	3	0·20	−0·40	*	*	*	*
	Marchmont Ⓢ	71	40	64·7	47·6	55·7	+ 2·4	96	0	2	0·15	−0·65	39·5	?	42	?
2. ENGLAND, N.E.	Alnwick Castle	69	41	63·1	49·7	56·1	+ 2·4	99	0	5	0·51	−0·20	*	*	*	*
	Durham	75	40	67·2	48·5	57·4	+ 2·4	108	0	3	0·33	−0·26	40·3	+12·5	43	+13
	Shields	73	41	65·6	50·1	57·5	+ 2·2	109	0	3	0·43	−0·09	*	*	*	*
	Scarborough Ⓜ	74	45	66·5	52·3	59·1	+ 3·4	120	0	3	0·32	−0·24	*	*	*	*
	York	74	43	68·6	52·1	60·0	+ 3·6	126	0	3	0·44	−0·19	43·9	+16·1	48	+19
	Spurn Head	70	49	64·9	54·4	59·4	+ 1·9	122	0	3	0·24	−0·20	*	*	*	*
3. ENGLAND, E.	Hillington Ⓜ	78	42	71·1	48·2	59·3	+ 2·4	121	0	3	0·27	−0·35	43·8	+11·8	48	+12
	Yarmouth	73	49	65·9	53·0	59·1	+ 1·3	120	0	2	0·06	−0·55	*	*	*	*
	Geldeston	79	39	69·8	46·9	57·8	0·0	111	0	2	0·05	−0·54	42·0	+ 4·2	46	+ 5
	Cambridge	80	44	72·4	49·6	60·5	+ 2·4	130	0	2	0·13	−0·39	55·1	+21·1	60	+22
	Rothamsted	78	41	68·9	48·6	58·3	+ 1·4	114	0	4	0·30	−0·30	48·5	?	53	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	77	36	69·7	48·3	58·5	+ 1·7	116	0	3	0·38	−0·15	*	*	*	*
	Loughborough	77	43	71·9	49·9	60·4	+ 2·7	129	0	3	0·44	−0·18	*	*	*	*
	Stamford (Ketton Hall)	79	41	71·6	48·9	60·0	+ 2·6	126	0	2	0·43	−0·24	*	*	*	*
	Cheadle Ⓜ	71	43	66·1	50·4	57·9	+ 3·1	111	0	3	1·21	+0·40	*	*	*	*
	Churchstoke Ⓜ	74	43	67·7	48·2	57·5	+ 2·4	109	0	3	0·62	−0·03	41·6	+ 9·6	45	+10
	Hereford Ⓜ	78	45	71·3	50·0	60·1	+ 2·9	127	0	2	0·08	−0·52	*	*	*	*
	Cirencester	74	45	69·6	48·0	58·3	+ 2·3	114	0	3	0·08	−0·62	44·1	+11·3	48	+13
	Oxford	78	43	70·4	50·0	59·7	+ 1·9	124	0	3	0·05	−0·51	48·1	+13·2	52	+14
5. ENGLAND, S.	London	81	46	72·6	52·0	61·8	+ 2·4	139	0	2	0·17	−0·33	47·4†	+17·4†	52†	+19†
	North Foreland	75	52	67·0	56·0	61·2	+ 3·2	134	0	3	0·19	?	*	*	*	*
	Strathfield Turgiss Ⓜ	80	42	72·2	49·6	60·5	+ 2·4	130	0	4	0·42	−0·12	*	*	*	*
	Dungeness	72	50	67·9	54·3	60·8	+ 1·3	132	0	2	0·15	−0·43	*	*	*	*
	Hastings (St. Leonards)	74	48	67·9	54·0	60·6	+ 0·8	130	0	3	0·40	−0·20	47·9	+ 8·2	53	+10
	Southampton	79	47	72·0	51·9	61·5	+ 2·2	137	0	2	0·31	−0·32	51·3	+12·3	56	+14
	Hurst Castle	74	51	69·7	55·6	62·3	+ 2·7	142	0	3	0·31	−0·34	*	*	*	*
	Stowell Ⓜ	76	46	68·7	51·1	59·5	+ 1·9	123	0	3	0·76	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	67	42	62·2	49·6	55·6	+ 1·0	95	0	4	0·83	−0·59	*	*	*	*
	Glasgow	68	43	62·9	50·2	56·3	+ 2·2	100	0	4	0·43	−0·47	34·4	+ 9·5	37	+11
	Ardrossan	67	46	63·3	51·9	57·3	+ 1·5	107	0	4	0·60	−0·22	*	*	*	*
	Glenlee Ⓢ	69	40	64·8	46·2	55·1	+ 1·5	92	0	4	0·35	−0·75	*	*	*	*
	Douglas (Isle of Man)	69	45	62·8	49·7	55·9	+ 0·9	97	0	4	0·75	−0·12	53·4	+18·9	58	+21
7. ENGLAND, N.W.	Stonyhurst	69	43	64·1	51·5	57·5	+ 1·9	109	0	4	0·81	−0·31	36·5	+ 6·3	40	+ 7
	Blackpool Ⓜ	77	?	66·6	?	?	?	?	0	4	0·84	−0·04	40·0	+ 9·8	43	+10
	Manchester	73	44	66·6	51·0	58·4	+ 2·3	115	0	3	0·34	+0·06	33·5†	?	36†	?
	Liverpool Obsy. (Bidston)	71	49	65·3	53·9	59·3	+ 1·8	121	0	4	0·97	+0·28	*	*	*	*
	Llandudno Ⓜ	72	50	65·9	53·5	59·3	+ 1·5	121	0	5	0·33	−0·35	41·7	+11·7	45	+14
	Holyhead	69	52	65·7	54·3	59·7	+ 2·4	124	0	4	0·35	−0·35	*	*	*	*
8. ENGLAND, S.W.	Llandovery	76	44	71·7	48·6	59·8	+ 2·9	125	0	3	0·86	−0·23	*	*	*	*
	Pembroke	67	52	64·6	56·6	60·4	+ 2·7	129	0	3	0·27	−0·47	56·7	+19·2	62	+21
	Bristol (Montpelier)	78	46	71·8	53·5	62·2	+ 4·4	141	0	3	0·79	?				
	Arlington (N. Devon)	70	49	66·3	51·3	58·4	+ 2·2	115	0	3	1·40	+0·30	*	*	*	*
	Cullompton Ⓜ	78	43	69·6	49·0	58·8	+ 1·9	118	0	3	0·55	−0·17	47·4	+11·9	52	+13
	Falmouth	72	53	66·7	56·1	61·1	+ 2·8	134	0	4	0·63	−0·37	58·1	+18·8	64	+22
	Plymouth	72	51	68·6	54·4	61·2	+ 2·1	134	0	3	0·31	−0·50	53·4	+15·2	59	+17
	Prawle Point	69	50	67·3	56·3	61·5	+ 3·3	137	0	3	0·15	−0·35	*	*	*	*
9. IRELAND, N.	Malin Head	69	51	61·4	53·9	57·5	+ 2·7	109	0	5	0·93	?	*	*	*	*
	Londonderry	76	46	67·4	50·6	58·6	+ 3·2	116	0	5	0·71	−0·17	*	*	*	*
	Edenfel (Omagh)	73	40	64·4	48·4	56·0	+ 1·5	98	0	4	0·64	−0·16	*	*	*	*
	Belmullet	72	47	64·1	54·6	59·1	+ 1·4	120	0	4	0·90	?	*	*	*	*
	Markree Castle	72	43	64·7	47·9	55·9	+ 1·5	97	0	5	0·93	+0·13	28·6	+ 4·7	31	+ 6
	Brookeborough	72	42	65·5	49·5	57·1	+ 3·3	106	0	4	0·56	−0·29	*	*	*	*
	Armagh	70	43	64·3	48·1	55·7	+ 0·9	96	0	3	0·33	−0·44	31·0	+ 5·8	34	+ 6
	Donaghadee	68	49	63·9	53·7	58·6	+ 3·5	116	0	5	0·50	−0·25	*	*	*	*
	Edgeworthstown	72	41	64·6	47·6	55·7	+ 1·0	96	0	4	0·41	−0·34	*	*	*	*
10. IRELAND, S.	Dublin	72	44	66·6	51·5	58·7	+ 1·9	117	0	3	0·25	−0·33	49·7	+17·4	54	+19
	Parsonstown	72	43	65·6	50·6	57·7	+ 2·1	110	0	3	0·71	−0·06	39·4	+10·2	43	+11
	Kilkenny	70	41	66·6	50·6	58·2	+ 1·7	113	0	3	0·35	−0·43	*	*	*	*
	Waterford	71	43	67·9	51·2	59·2	+ 0·9	120	0	3	0·27	−0·60	*	*	*	*
	Roche's Point	68	49	65·4	55·7	60·3	+ 2·8	128	0	3	0·33	−0·65	*	*	*	*
	Valencia	72	43	66·7	53·7	59·9	+ 2·3	125	0	3	0·83	−0·27	38·1	+ 6·6	41	+ 7
	Killarney	71	45	66·3	49·6	57·6	+ 0·8	109	0	4	0·75	?	*	*	*	*
	Foynes	71	46	66·3	52·8	59·2	+ 2·9	120	0	4	0·66	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	72	54	68·0	58·6	63·1	+ 3·9	148	0	4	1·29	+0·57	*	*	*	*
	Jersey	77	56	71·3	59·3	65·0	+ 3·9	161	0	4	0·29	−0·39	63·5	+16·0	70	+19

Stations marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

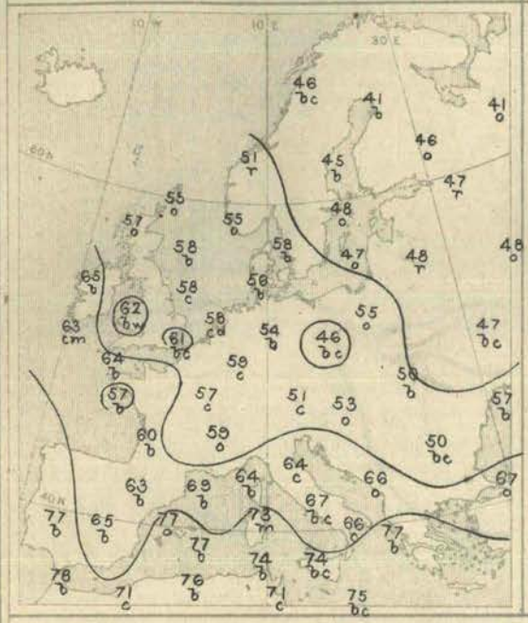
* An asterisk is inserted in all places for which the information is not usually received.

† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row) at the Kew Observatory, and the Meteorological Office Victoria Street. For additional Reports of Sunshine see last page.

Sunday, 3rd September.

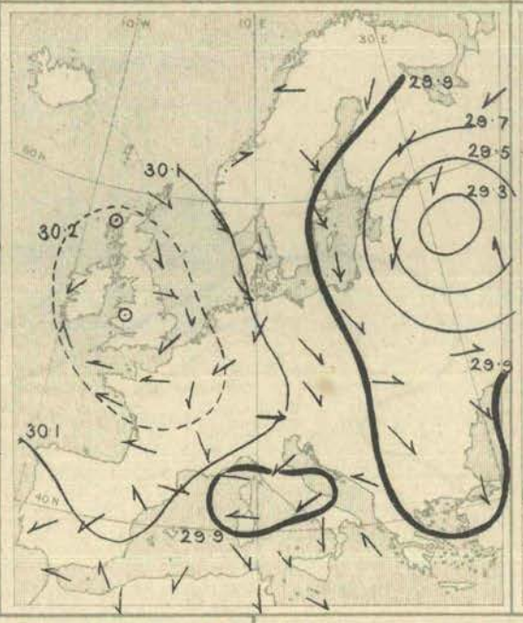
Temperature and Weather.

8 a.m.

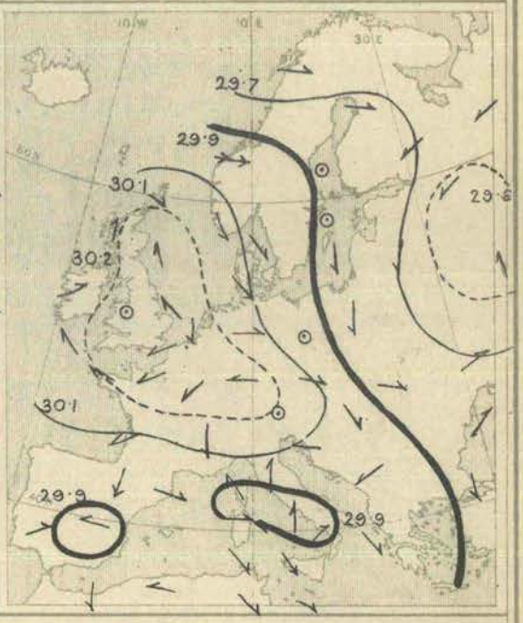


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning fine generally over the greater part of the Mediterranean, southern and western Europe, including the British Islands, but hazy at many of our own stations; cloudy or overcast elsewhere, rainy at Christiansund, as well as over the south of Finland and the Baltic Provinces. Rain falling later in central Russia and the north of Norway, and slight showers at Stornoway, the north Foreland, and Cape Gris Nez; weather fine elsewhere, but cloudy in the south-east of England.

Temperature still exceeding 70° in the far south, and exceeding 60° over southern Europe generally, and at some stations in the British Islands; much lower over northern and eastern Europe, and as low as 41° at Archangel and Haparanda, 45° at Herösand and Helsingfors, 48° at Stockholm, Riga, Moscow, and Kharkov. Slightly exceeding 70° later in many parts of England and at Paris, and touching 81° at Brest, 84° at Perpignan, 88° at Lisbon, and 90° at Madrid and Palermo.

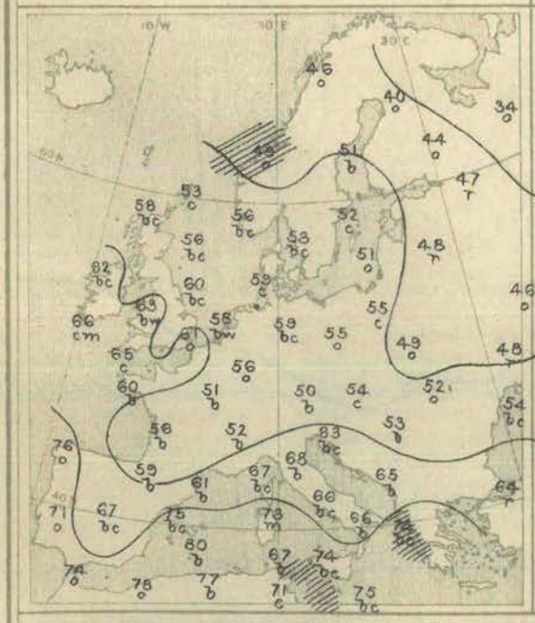
Wind very light and anticyclonic over the British Islands, North Sea, and greater part of France, cyclonic Northerly to North-Westerly over Finland, the Baltic, and neighbouring Provinces, North-Westerly to Westerly over Germany, Westerly to Southerly over southern and central Russia. A separate cyclonic circulation over the northern half of the Mediterranean and Italy. Blowing freshly from North at Biarritz later, and rising to a gale from the Westward at Christiansund; no important change occurring elsewhere.

Barometer highest, 30·2 ins. and more in an anticyclone covering the United Kingdom and northern half of France, and exceeding 30·0 ins. over the whole of western Europe. Lowest, about 29·3 ins. in a depression having its centre a little to the south-eastern part of St. Petersburg; and below 29·9 ins. in another over the northern parts of the Mediterranean and Italy; gradients steep over the Baltic. Russian depression subsequently moving eastwards and partially filling up. Anticyclone drifting slowly south-eastwards; barometer falling in most parts of western Europe.

Monday, 4th September.

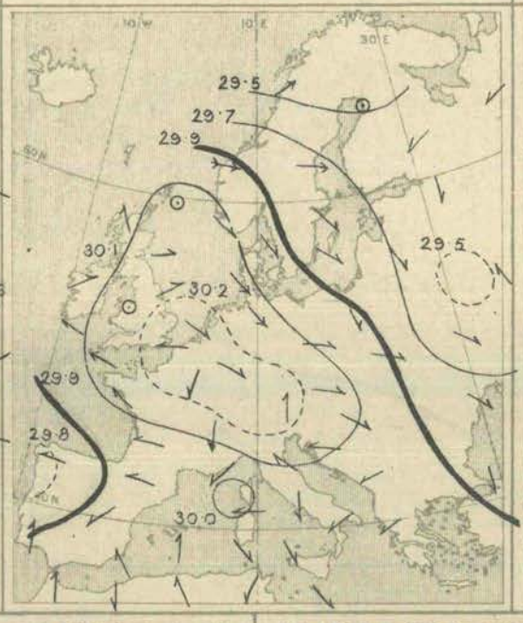
Temperature and Weather.

8 a.m.

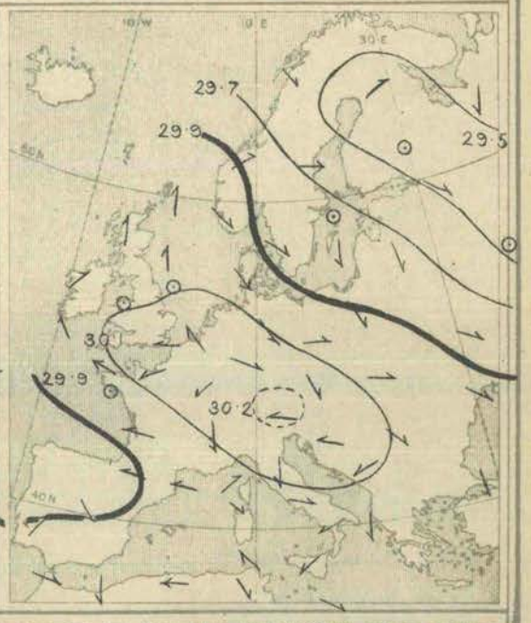


Barometer and Wind.

8 a.m.



6 p.m.



Weather fine in nearly all the western and southern countries, but dull in Portugal and the north-west of Spain. Dull over the greater part of Russia, Germany, and the north of Scandinavia, with rain at St. Petersburg, Riga, and Kiev. Heavy rain falling during day at some of the Scandinavian stations, but weather remaining fine in nearly all parts of western and southern Europe.

Temperature changed little and irregularly. Morning readings highest, 81° at Sfax, 80° at Palma, 78° at Oran, and 77° at Algiers; above 70° in the south of Italy and also on the coasts of the Iberian Peninsula. Lowest, 34° at Archangel, 40° at Uleaborg, 44° at Kuopio, 45° at Helsingfors, and 46° at Bodö and Moscow, below 50° in Poland, and below 55° over Austria and central France, as well as in the north of Scotland. Rising during day to 70° or more in several parts of the United Kingdom, and reaching 75° at Cambridge and 77° at Loughborough; exceeding 80° in Spain, Italy, and the west of France, and reaching 92° at Madrid and 95° at Biarritz.

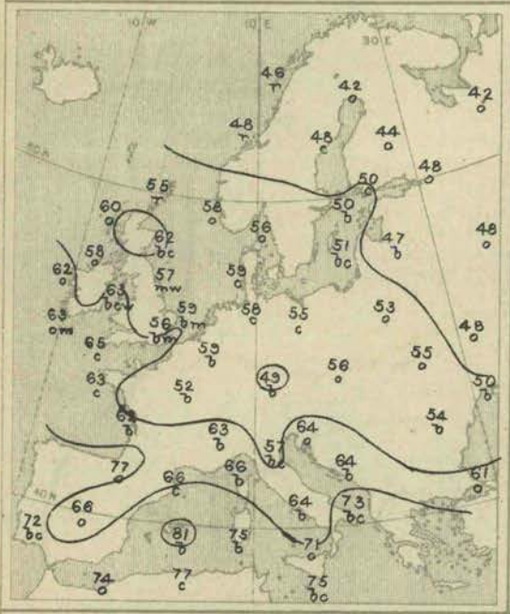
Wind light to fresh from the Eastward over France, the north of Spain, and the south of England, light from the South-Eastward in the south of Ireland, from the Southward on our extreme north-western and northern coasts, and from the South-Westward in the north-east of Great Britain. Westerly or North-Westerly over the greater part of Scandinavia, Denmark, Germany, Austria, and the west of Russia; strong in force in some of the Swedish and Norwegian stations, with a gale at Christiansund. Northerly (North-East to North-West) in Italy. Variable in Algeria and the south of Spain. No important change occurring during day.

Barometer highest, 30·1 ins. to 30·3 ins. in a large anticyclone covering our Islands, the North Sea, Germany, the Netherlands, and the greater part of France. Lowest, 29·5 ins. and less over the north of Scandinavia, and also in a small depression lying near Moscow, 29·8 ins. and less in a shallow system off the north-west of Spain. General fall of barometer taking place over western Europe during day, anticyclone moving south-eastwards and becoming gradually reduced both in size and height.

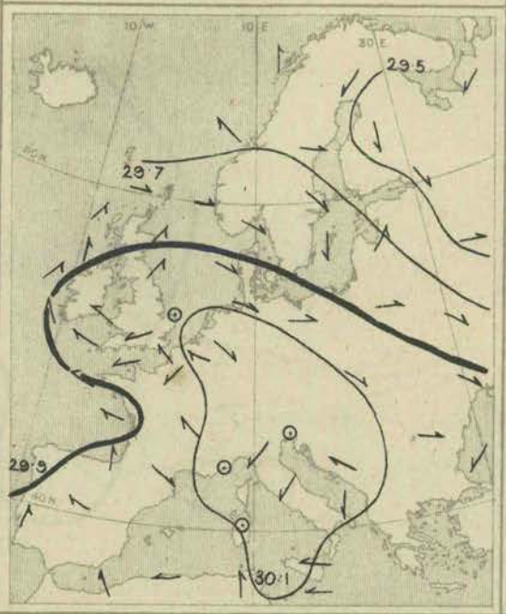
Judd & Co Ltd, Lith. 63, Carter Lane.

Tuesday, 5th September.

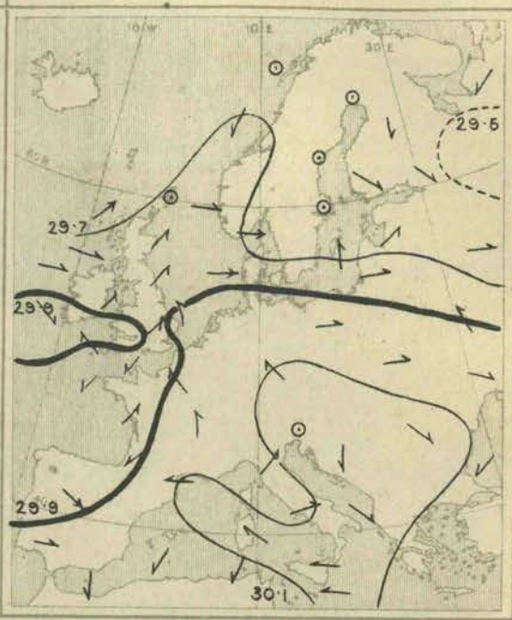
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over southern Europe, the Mediterranean, France, and England, cloudy or overcast in most other places, rainy in the north-west of Norway and the Shetlands. Rain later (1) in several parts of Russia, Scandinavia, Scotland, and the north of Ireland; (2) at Jersey and in the north and west of France, thunder and lightning in the Channel Islands and at several French stations. Appearance of sky very unsettled for a time in south of England.

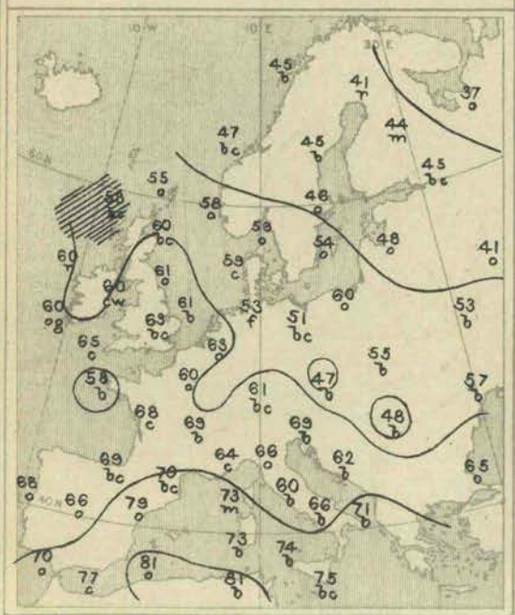
Temperature in morning highest, 70° to 79° on the coast of the Peninsula and the southern half of the Mediterranean, and exceeding 60° on the southern and western coasts of the Continent and British Isles generally. Lowest, 42° at Archangel and Haparanda, 46° at Bodö, 48° at Christiansund, Hernösand, St. Petersburg, Moscow, Kharkov, and Kiev. Rising later to between 76° and 77° in many parts of Great Britain, and to 80° or more at several of the French, Spanish, and Italian stations, the highest readings of all being 90° at Madrid, and 89° at Bordeaux.

Wind very light and anticyclonic over central and southern Europe; light to moderate from the Eastward over the Bay of Biscay, the Channel, and south of England, South-Easterly to Southerly in the other parts of our Islands, Westerly in the Shetlands, and North-Westerly on the eastern shores of the North Sea and over the Baltic. Becoming more Westerly in the north and west of our Islands later; no important change occurring elsewhere.

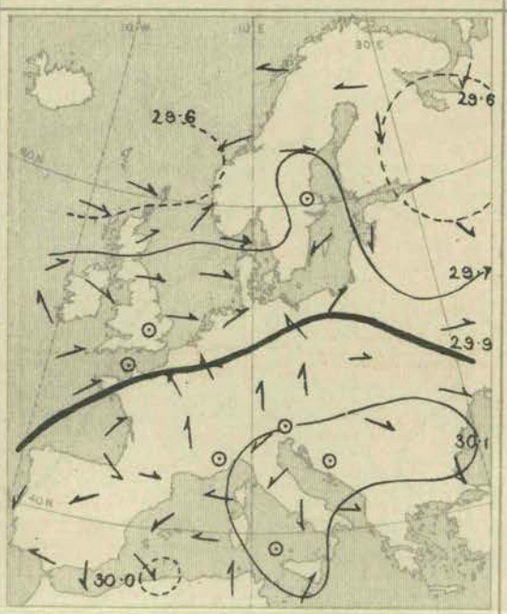
Barometer highest, 30·1 ins. and more to 30·0 ins. in an anticyclone covering the whole of the Mediterranean and central Europe. Lowest, 29·5 ins. and less over all the northern half of Russia, and below 29·9 ins. over the Bay of Biscay. Some local disturbances over the Channel and south-east of England later. Anticyclone moving slowly south-eastwards.

Wednesday, 6th September.

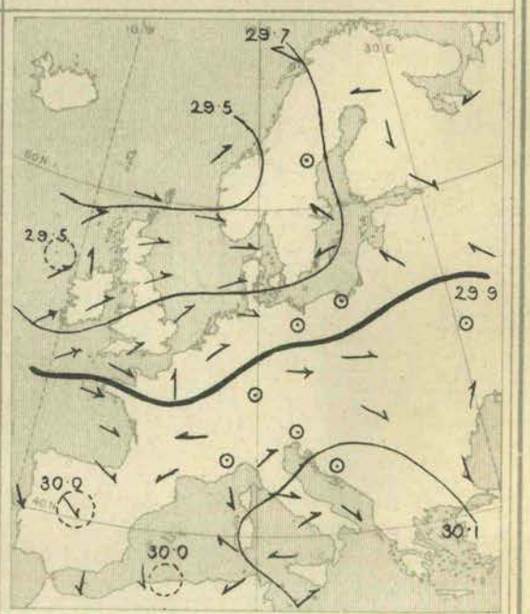
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fair or fine over the greater part of our Islands, but dull at some of the English and Irish stations, and rainy on our extreme north-west coasts. Fine and bright over the Continent generally, but overcast in Spain, the south of Sweden, and the extreme north of Russia, with rain at Uleaborg. Dull, rainy weather setting in later over the western parts of our Islands, and spreading quickly to nearly all parts of western Europe. Thunderstorms occurring at Lyons and Frederickshaven, and lightning seen at the North Foreland.

Temperature changed very irregularly. Morning readings highest, 81° at Palma, Algiers, and La Calle, 79° at Barcelona, 78° at Sfax, and 77° at Oran; above 70° at most of the Mediterranean stations and also on the coasts of the Spanish Peninsula. Varying between 60° and 68° over the eastern and southern parts of England. Lowest, 37° at Archangel, 41° at Uleaborg and Moscow, and 44° at Kuopio and Helsingfors. Rising during day to between 75° and 80° in many parts of England, and reaching 81° in London. Exceeding 80° in many parts of southern Europe, the highest reading of all being 90° at Madrid and Cape Béarn.

Wind light to moderate from the Westward or South-Westward in all the more northern parts of the United Kingdom and also on the eastern shores of the North Sea. Variable in the south of England, Southerly or South-Easterly over France, Germany, and the Netherlands. Light Northerly over the northern parts of Russia, but Westerly in the south of that country, variable over southern Europe and the Mediterranean. South-Westerly breezes setting in later over the whole of the United Kingdom, and blowing freshly on our south-west coasts; wind veering to the Westward in the West of France.

Barometer highest, 30·1 ins. and upwards in an anticyclone lying over Italy and the greater part of south-eastern Europe. Lowest, 29·6 ins. and less in two large shallow depressions, one lying to the northward of our Islands, and the other over the north of Russia. Small secondary disturbance appearing later off the north-west of Ireland, and barometer falling rather decidedly on our western and southern coasts.

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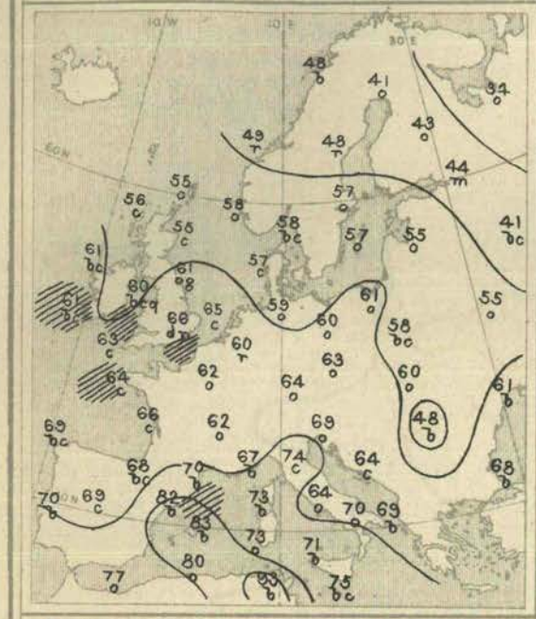
Thursday, 7th September.

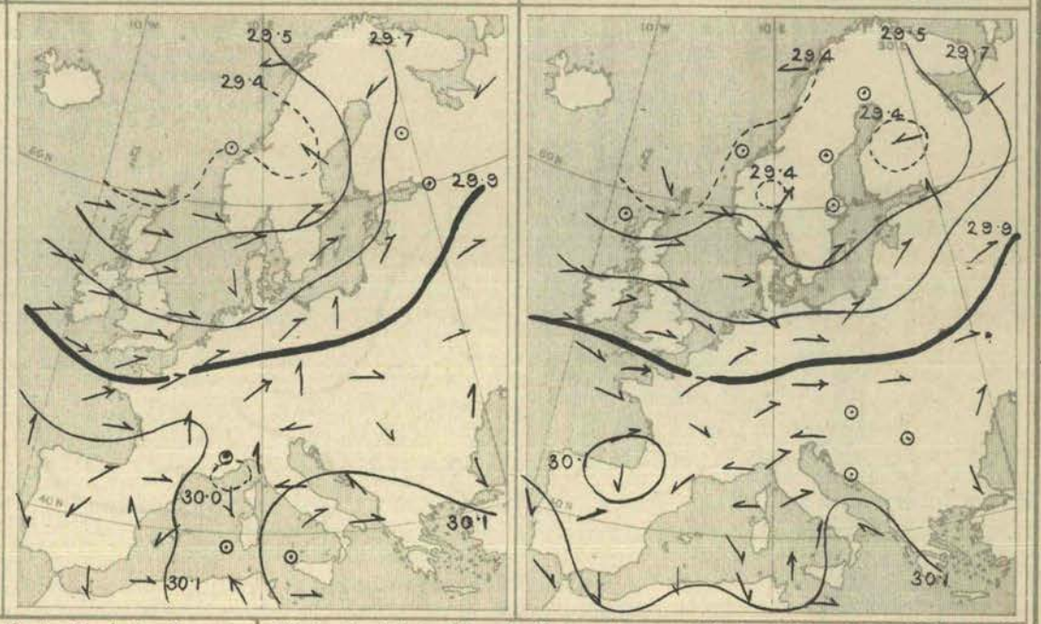
Temperature and Weather. 8 a.m.



Weather cloudy over the greater part of our Islands and the Continent, with showers in many isolated places. Fine and bright over Spain and the southern parts of France, Italy, and Russia. Rain falling during day in all our more western and northern districts—heavily in the north of Scotland, and slight showers at some of our southern and eastern stations; thunder and lightning occurring in several parts of Ireland and also in the west of France. Considerable amounts of rain reported at some of the German and Russian stations.

Temperature risen generally. Morning readings highest, 93° at La Calle, 83° at Palma, 82° at Barcelona, and 80° at Algiers, above 70° at most of the Mediterranean stations, and above 65° at several of our own southern and south-eastern stations. Lowest, 34° at Archangel, 41° at Haparanda and Moscow, 43° at Uleaborg and Kuopio, 44° at St. Petersburg, and 48° at Bodö and Hernösand. Rising during day to between 70° and 75° at several of the English stations, and reaching 76° in London. Exceeding 75° over the greater part of France, and reaching 85° at Lyons, 86° at Perpignan, 88° at Palermo, and 90° at Madrid.

Barometer and Wind. 8 a.m. and 6 p.m.

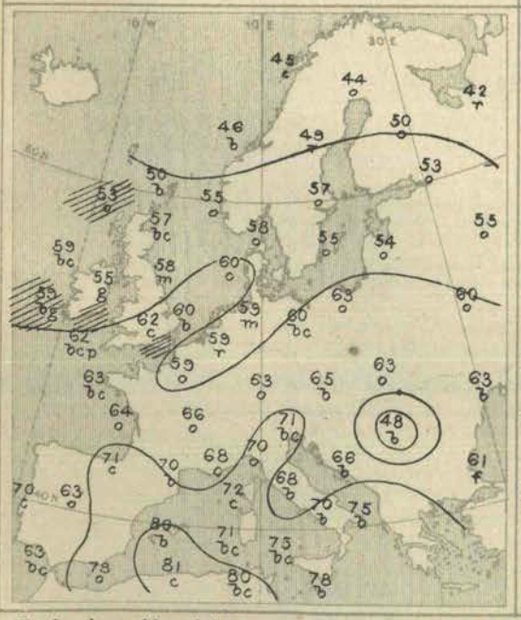


Wind moderate to fresh from the Westward over our Islands, and from the South-Westward over France, Germany, and the Netherlands; Southerly over the Baltic, South-Easterly or Easterly over the northern parts of Scandinavia. Light and variable over southern and eastern Europe and the Mediterranean. Subsequently becoming very variable in the north of Scotland; no important change occurring elsewhere.

Barometer highest, 30·1 ins. and upwards over Morocco, the Spanish Peninsula, and the south of France, and also in another area lying over southern Italy, Greece, and the eastern parts of the Mediterranean. Lowest, 29·4 ins. and less in two depressions, one lying over the central parts of Scandinavia and the other to the northward of our Islands. Depressions subsequently moving eastwards, but numerous shallow secondary disturbances travelling across our Islands during day from the westward.

Friday, 8th September.

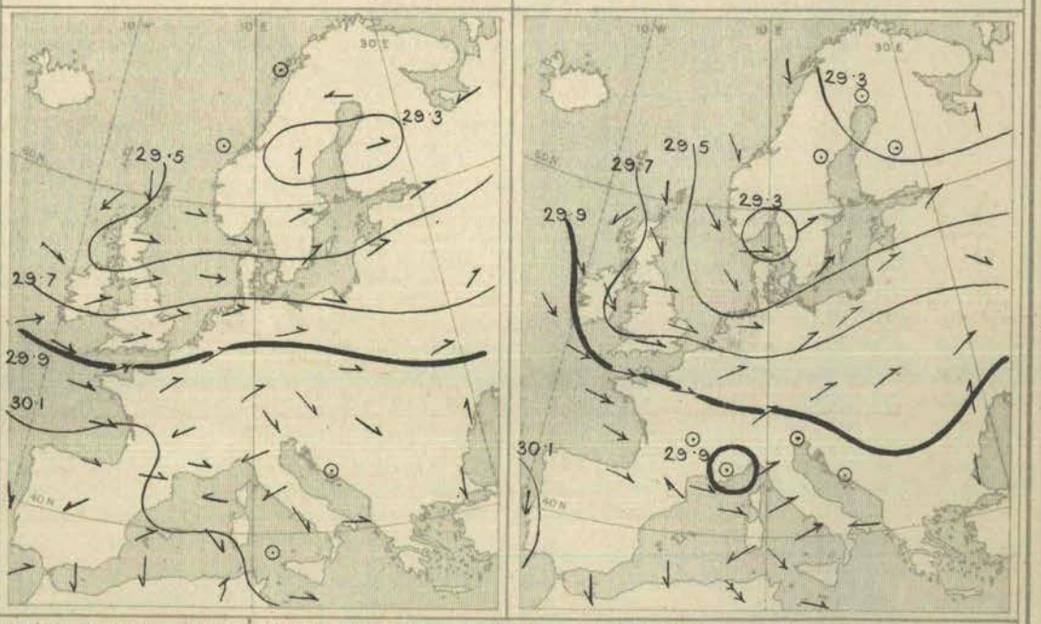
Temperature and Weather. 8 a.m.



Weather changeable and showery over the greater part of the United Kingdom, and dull at many of the Continental stations, with rain at Archangel, Hernösand, Brussels, and Limoges. Fine and bright over central Germany, Austria, Italy, and the southern parts of Spain and Russia. Heavy showers falling during day in many parts of western Europe, with thunder and lightning at most of the English stations, as well as in some parts of Germany.

Temperature fallen in most of the western countries, but risen elsewhere. Morning readings highest, 81° at Algiers, 80° at Palma and La Calle, and 79° at Sfax; above 70° at most of the Mediterranean and Adriatic stations, as well as on the coast of the Spanish Peninsula. Lowest, 42° at Archangel, 44° at Haparanda and Uleaborg, 45° at Bodö, and 46° at Christiansund, below 50° over the northern parts of Russia and Scandinavia generally, and very little above it in some parts of Ireland and Scotland. Rising during day to between 65° and 68° over the central and southern parts of England, and to 75° or more at many of the French stations; reaching 84° at Lyons, 86° at Perpignan and Cagliari, and 88° at Barcelona.

Barometer and Wind. 8 a.m. and 6 p.m.



Wind South-Westerly or Westerly over Ireland, England, and the greater part of central Europe, with Russia, Denmark, and the south of Scandinavia, light or moderate in force generally, but fresh or strong over the southern parts of the United Kingdom. Light from the Eastward in Lapland. Calm in the west of Norway, North-Easterly in the north of Scotland. Light and variable over Spain, Italy, and Algeria. Subsequently veering to the North-Westward or Northward in all but the south-eastern parts of the United Kingdom, heavy squalls from the Westward experienced during day at many of the English stations.

Barometer highest, 30·1 ins. and upwards over Spain, Algeria, and the western parts of the Mediterranean, 30·0 ins. and upwards over all the more southern parts of Europe. Lowest, 29·3 ins. and less in a depression lying over Finland and the north of Sweden; well-marked V shaped secondary extending south-westwards over the North Sea and Scotland. Secondary disturbance subsequently moving south-eastwards over our Islands, barometer rising on all our western and northern coasts.

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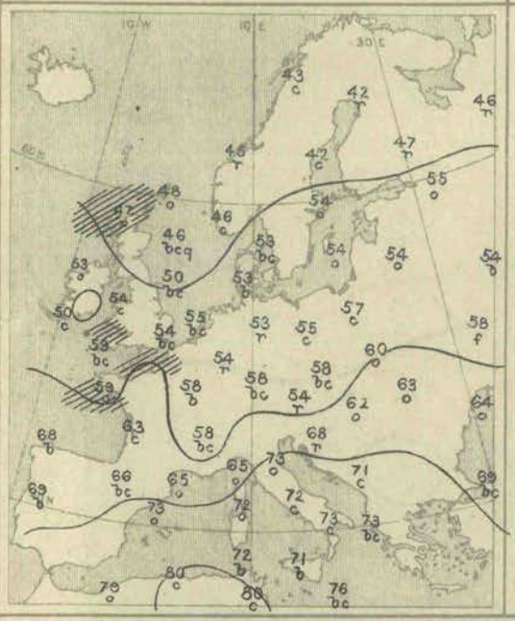
Saturday, 9th September.

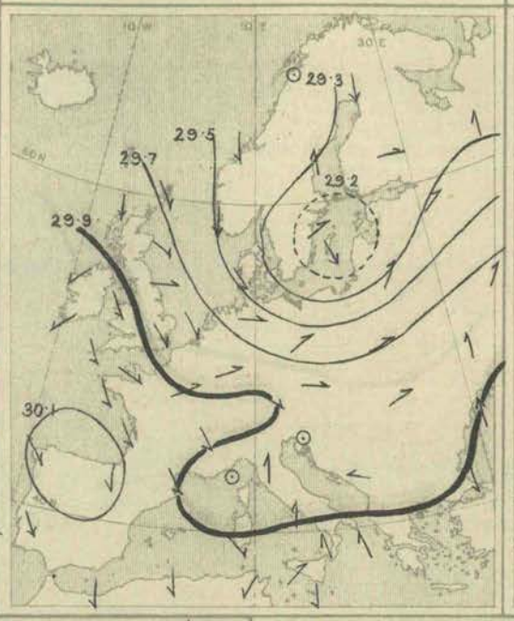
Temperature and Weather.

8 a.m.

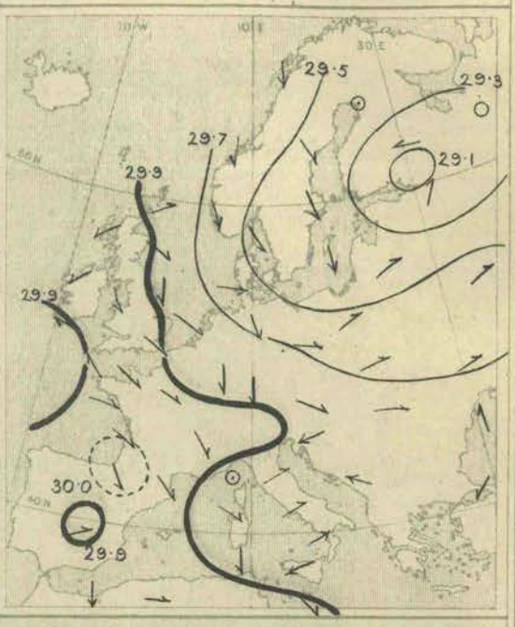


Barometer and Wind.

8 a.m.



6 p.m.



Weather fine and bright over the greater part of western Europe, but showery at some of the Irish and Scotch stations. Cloudy or overcast in most of the northern, eastern, and central countries, with rain at Kuopio and Christiansund; fine over Spain and southern Italy. Showers falling during day in many parts of western and central Europe; large amounts of rain measured over Scandinavia, northern Russia, and central Italy. Thunderstorms occurring at some of the Algerian stations. Heavy rain setting in at night at Scilly.

Temperature fallen in all but the southern countries. Morning readings highest, 80° at Algiers and La Calle, 79° at Oran, and 78° at Nemours and Sfax; above 70° at most of the Mediterranean and Adriatic stations, and above 65° over Spain and the south of France. Lowest, 41° at Ulleaborg, 42° at Haparanda and Hernösand, 43° at Bodö, and 45° at Christiansund; below 50° over Scotland and central Ireland. Rising during day to between 61° and 66° over the central and southern parts of our Islands, to 70° or a little above it in France, and to 80° or more in Spain and Italy, the highest reading of all being 88° at Cagliari and Palermo. Ground frost occurring over central England at night.

Wind light to fresh from the North-Westward or Northward over the greater part of western Europe, as well as in Scandinavia and Denmark; moderate from the South-Westward over Germany and the Baltic Provinces; light from the Southward at most of the Russian stations. Light from South or South-East in Italy; Northerly at most of the Algerian stations. North-Westerly current subsequently falling light; wind shifting to the Eastward or South-Eastward in the extreme west and south-west of our Islands.

Barometer highest, 30·1 ins. and upwards over the northern half of the Spanish Peninsula; 30·0 ins. and upwards over the whole of Spain, the Bay of Biscay, the south-west of France, and the southern parts of Ireland. Lowest, 29·2 ins. and less in a well-marked depression lying over the south of Sweden and the neighbouring parts of the Baltic. Depression subsequently moving north-eastwards to Finland, but new disturbance approaching the south-west of our Islands from the westward.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force is indicated thus : ⟫⟶ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze: and ⊙ = a calm. In the left-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Germany, Sweden, and Norway, and 7 a.m. in France, Algeria, Italy, Austria, and Russia; that for 6 p.m. is prepared from observations made at 6 p.m. in the British Islands and France, 7 p.m. in Algeria, 8 p.m. in Sweden and Norway, Germany, and Austria, and 9 p.m. in Russia, Belgium, and Italy. The time indicated in each case is the standard time for each country.

GENERAL NOTES.

At the commencement of the week a large anticyclone covered the greater part of western Europe, its central area being situated immediately over our Islands. On the 4th and 5th, however, the system moved south-eastwards across central Europe to the eastern parts of the Mediterranean, while a series of large depressions began to travel over Scandinavia from the westward. Varying Westerly (South-West to North-West) winds, therefore, set in over the greater part of Europe, with changeable, showery weather, and with thunderstorms in many portions of our Islands, France, and Germany. On the 8th, a large "V" shaped depression, subsidiary to the disturbance in the far north, moved quickly south-eastwards across Great Britain, and occasioned strong squalls from the Westward in many parts of our Islands, with smart thunderstorms over England. In its rear the wind shifted to the North-Westward or Northward, and temperature fell rapidly, slight ground frost being experienced over central England on the night of the 9th. Over southern Europe the weather during the week was mostly fine, but at the close of the period heavy rain fell over central Italy.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 212.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	34·7	?	37	?	EASTBOURNE	46·2	?	51	?
OSWALDKIRK (Yorkshire)	38·6	?	42	?	TENBY	58·2*	?	63*	?
WORKSOP	39·2	+11·1	43	+13	NEWQUAY	62·1	?	68	?
THURCASTON (Leicestershire)	43·0	+14·5	47	+16	TORQUAY	57·5*	?	63*	?
MARGATE	44·6	?	49	?	ARLEY COTTAGE (County Cavan)	23·7	?	26	?
WESTBOURNE (Sussex)	44·2*	?	49*	?	GUERNSEY	68·9*	?	76*	?
BRIGHTON	53·1	?	58	?					

* The values at Westbourne, Tenby, Torquay and Guernsey are obtained by Jordan's Photographic Recorder.

Judd & Co Ltd, Lith, 63, Carter Lane,

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; R. H. SCOTT, F.R.S., SECRETARY.

By whom Subscriptions, payable in advance, can be received.

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VOL. X. No. 37.] *Third Series.* WEEK ENDING SATURDAY, 16TH SEPTEMBER, 1893. [*Price 6d.* *Annual Subscription, post paid*, £1 10s. 0d.

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871-90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the twenty-five years 1866-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the ten years 1881-90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

	DISTRICTS. (See p. 218.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 1st, 1893. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	65	31	59·2	46·2	52·4	1 above.	73	+ 6	0	− 1	2094	+586	485	− 57
	1. SCOTLAND, EAST	72	29	62·8	45·2	53·6	1 above.	81	0	0	− 1	2320	+382	548	− 21
	2. ENGLAND, N.E.	73	34	64·0	46·7	55·0	0 (average)	91	+ 3	0	− 1	2509	+446	436	− 62
	3. ENGLAND, EAST	75	35	67·3	43·9	55·0	1 below.	91	− 9	0	0	2897	+500	524	− 37
	4. MIDLAND COUNTIES	76	30	66·7	42·4	54·0	1 below.	84	−11	0	− 1	3015	+653	505	− 48
	5. ENGLAND, SOUTH	79	39	66·9	50·0	58·1	0 (average)	113	+ 4	0	0	3150	+568	373	− 43
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	70	30	61·8	46·4	53·7	0 (average)	82	0	0	0	2501	+519	354	− 63
	7. ENGLAND, N.W.	76	40	63·4	50·0	56·4	1 above.	101	+ 8	0	0	2859	+708	323	− 91
	8. ENGLAND, S.W.	73	33	65·0	48·8	56·5	0 (average)	102	+ 1	0	0	3095	+713	246	− 70
	9. IRELAND, NORTH	71	34	62·7	47·6	54·8	1 above.	90	+ 3	0	0	2705	+585	258	−104
	10. IRELAND, SOUTH	71	31	64·6	48·9	56·4	1 above.	101	+ 6	0	0	3030	+644	178	−100
	—CHANNEL ISLANDS	77	52	65·1	55·4	30·0	1 above.	126	+ 8	0	0	3467	+826	70	− 52

Rainfall.

	DISTRICTS. (See p. 218.)	For the Week. Number of Rainy Days.	Total Fall.	More or less than the mean for the Week.	From Jan. 1st, 1893. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.
			10ths of in.	10ths of ins.			Ins.	Ins.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	5	27	17 more.	163	− 4	30·3	− 1·5
	1. SCOTLAND, EAST	3	2	5 less.	131	− 7	17·4	− 4·2
	2. ENGLAND, N.E.	1	less than ½	6 less.	111	−16	13·7	− 4·1
	3. ENGLAND, EAST	1	less than ½	6 less.	108	−16	12·7	− 4·9
	4. MIDLAND COUNTIES	0	–	7 less.	105	−17	13·2	− 6·4
	5. ENGLAND, SOUTH	1	3	3 less.	101	−17	13·2	− 5·0
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	3	4	7 less.	128	−18	24·1	− 8·9
	7. ENGLAND, N.W.	2	3	5 less.	116	−17	18·0	− 4·9
	8. ENGLAND, S.W.	1	1	9 less.	105	−31	19·7	− 6·6
	9. IRELAND, NORTH	3	2	6 less.	129	−19	21·9	− 2·7
	10. IRELAND, SOUTH	2	1	7 less.	121	−23	20·5	− 6·1
	—CHANNEL ISLANDS	2	14	7 more.	110	−33	16·4	− 4·6

Bright Sunshine.

	DISTRICTS. (See p. 218.)	For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 1st, 1893. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	30	+ 1	33	+ 1	879	− 91	25	− 3
	1. SCOTLAND, EAST	39	+18	44	+ 20	1156	+ 28	33	+ 1
	2. ENGLAND, N.E.	40	+12	44	+ 14	1278	+248	37	+ 7
	3. ENGLAND, EAST	52	+18	58	+ 22	1526	+280	45	+ 8
	4. MIDLAND COUNTIES	46	+15	52	+ 20	1440	+327	42	+ 10
	5. ENGLAND, SOUTH	48	+14	55	+ 17	1580	+371	46	+ 10
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	44	+15	50	+ 19	1304	+188	38	+ 6
	7. ENGLAND, N.W.	35	+ 7	39	+ 9	1291	+187	37	+ 5
	8. ENGLAND, S.W.	40	+ 2	45	+ 4	1666	+350	49	+ 10
	9. IRELAND, NORTH	35	+12	39	+ 14	1111	+ 96	32	+ 3
	10. IRELAND, SOUTH	35	+ 5	39	+ 6	1250	+ 71	36	+ 2
	—CHANNEL ISLANDS	44	+ 2	49	+ 1	1959	+419	58	+ 13

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather during this period was fine and bright over the greater part of the Kingdom, but extremely heavy falls of rain were experienced over the north-west of Scotland. Towards the end of the week heavy rain also occurred locally at some of our southern stations.

Temperature did not differ materially from the normal. The highest of the maxima were recorded on the 14th, when they varied from 79° in England S., to 70° in Scotland W., and to 65° in Scotland N. The absolute minima, which were registered at most stations either on the 12th or 13th, were very low generally; in Scotland E. the thermometer fell to 29°, in the Midland Counties and Scotland W. to 30°, in Scotland N. and Ireland S. to 31°, and in most other districts to between 33° and 40°. In the Channel Islands, however, the lowest reading was 52°.

Rainfall greatly exceeded the mean in Scotland N. and the Channel Islands, but was much less in all other districts; in most parts of England the fall was extremely slight. At Glencarron during the 12th, the fall amounted to as much as 3·59 ins., and at Fort William to 2·91 ins.

Bright Sunshine again exceeded the mean, the percentage of the possible duration ranging from 58 in England E., 55 in England S., and 52 in the Midland Counties, to 39 in England N.W. and over Ireland, and to 33 in Scotland N.

Barometer and Wind.—At the commencement of the week an anticyclone lay over the northern parts of our Islands, while a depression off our extreme south-west coasts was causing an Easterly gale to prevail in the Scilly Islands. By Monday the depression had disappeared southwards and the anticyclone had extended to all parts of our Islands, with Easterly winds in the south and Westerly breezes in the north. Depressions (subsidiary to large systems moving eastwards to Scandinavia) now began to appear off our northern coasts and the anticyclone moved slowly southwards. The winds over the entire Kingdom consequently became Westerly and occasionally blew freshly or strongly in the north. On Saturday a shallow depression was moving north-eastwards from France, producing North-Easterly winds at our southern stations, and very heavy rain in the Channel Islands.

607 1|90 J. & Co., Ltd.
213 70 9|93 1896

II.—DATA from which the SUMMARY on page 217 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°				Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	59	41	55·6	48·3	51·8	+ 1·2	69	0	5	1·78	+1·03	*	*	*	*
	Stornoway	61	37	59·7	47·1	53·1	+ 3·0	78	0	5	2·64	+1·68	25·8	+ 0·8	29	+ 1
	Wick	63	36	58·4	45·6	51·7	0·0	68	0	5	0·77	+0·17	*	*	*	*
	Lairg Ş	63	31	60·5	45·7	52·7	+ 1·4	75	0	5	1·54	+0·83	*	*	*	*
	Glencarron Ş	61	34	58·4	44·9	51·3	+ 0·5	65	0	5	6·00	+4·42	*	*	*	*
	Fort Augustus Ş	65	34	61·9	44·8	52·9	+ 0·5	76	0	4	1·64	+0·77	26·1	?	29	?
	Fort William Ş	63	36	60·0	47·2	53·3	+ 0·3	79	0	5	4·19	+2·65	36·6	?	41	?
1. SCOTLAND, E.	Nairn	65	35	62·0	45·3	53·3	+ 0·4	79	0	5	0·49	−0·11	*	*	*	*
	Aberdeen	72	37	62·7	46·3	54·1	+ 1·2	85	0	5	0·39	−0·30	45·6	+18·1	51	+20
	Braemar Ş	63	29	59·8	42·2	50·6	+ 1·0	60	0	4	0·11	−0·69	37·0†	?†	42†	?†
	Ochtertyre Ş	70	34	65·9	45·7	55·3	+ 2·4	93	0	1	0·03	−0·82	*	*	*	*
	Leith	68	36	63·9	45·9	54·5	− 0·2	88	0	0	—	−0·57	*	*	*	*
	Marchmont Ş	66	38	62·4	45·7	53·7	+ 1·4	82	0	2	0·08	−0·72	35·3	?	40	?
2. ENGLAND, N.E.	Alnwick Castle	67	34	60·4	47·3	53·7	+ 1·0	82	0	1	0·04	−0·66	*	*	*	*
	Durham	71	35	64·6	44·2	53·9	+ 0·2	83	0	0	0·01‡	−0·57	36·4	+11·2	41	+13
	Shields	70	38	64·0	46·3	54·7	+ 0·5	89	0	2	0·10	−0·47	*	*	*	*
	Scarborough M	72	42	65·9	46·8	55·9	+ 1·0	97	0	1	0·02	−0·63	*	*	*	*
	York	73	34	66·0	44·1	54·5	− 0·7	88	0	1	0·01	−0·63	40·3	+15·2	45	+17
	Spurn Head	67	47	63·1	51·6	57·1	+ 0·6	106	0	1	0·04	−0·43	*	*	*	*
3. ENGLAND, E.	Hillington M	74	35	67·4	40·9	53·5	− 2·1	85	3	0	—	−0·64	51·0	+21·8	57	+23
	Yarmouth	72	44	65·3	50·1	57·3	+ 0·6	107	0	1	0·02	−0·66	*	*	*	*
	Geldeston	75	37	68·1	44·5	55·7	− 0·9	96	0	1	0·04	−0·56	49·3	+14·1	56	+16
	Cambridge	75	36	69·1	40·3	54·0	− 2·8	91	5	0	—	−0·52	55·3	+23·3	63	+27
	Rothamsted	72	36	66·5	43·5	54·5	− 1·1	88	0	1	0·03	−0·60	50·2	?	57	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	70	30	66·3	41·1	53·1	− 2·3	81	3	0	—	−0·58	*	*	*	*
	Loughborough	74	31	68·6	38·6	52·9	− 3·5	91	10	0	—	−0·64	*	*	*	*
	Stamford (Ketton Hall)	74	34	68·1	41·3	54·1	− 2·0	88	2	0	—	−0·69	*	*	*	*
	Cheadle M	69	41	63·8	47·4	55·2	+ 1·6	92	0	0	—	−0·79	*	*	*	*
	Churchstoke M	70	35	63·7	41·6	52·1	− 1·7	72	1	1	0·01	−0·64	39·5	+ 9·7	44	+11
	Hereford M	73	36	67·4	41·7	53·9	− 1·9	85	1	0	—	−0·65	*	*	*	*
	Cirencester	73	37	67·0	44·4	55·2	+ 0·4	92	0	0	—	−0·74	56·6	+27·6	64	+31
	Oxford	76	38	68·4	43·4	55·3	− 1·3	93	0	0	—	−0·62	51·5	+19·7	59	+23
5. ENGLAND, S.	London	76	41	69·3	47·1	57·7	− 0·2	110	0	1	0·21	−0·33	46·1†	+19·1†	52†	+22†
	North Foreland	70	51	64·6	55·6	59·9	+ 2·3	125	0	2	0·34	?	*	*	*	*
	Strathfield Turgiss M												*	*	*	*
	Dungeness	69	45	65·6	52·6	58·8	+ 0·5	118	0	1	0·64	+0·02	*	*	*	*
	Hastings (St. Leonards)	70	49	65·8	51·9	58·5	− 0·2	116	0	1	0·80	+0·18	48·2	+10·6	55	+13
	Southampton	79	44	70·8	47·3	58·5	+ 0·5	116	0	1	0·03	−0·67	51·3	+15·5	58	+18
	Hurst Castle	73	47	67·6	50·3	58·5	+ 0·1	119	0	2	0·08	−0·62	*	*	*	*
	Stowell M	69	39	64·8	45·4	54·6	− 0·9	88	0	0	—	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	64	35	60·7	47·9	54·0	+ 0·5	84	0	5	1·21	−0·34	*	*	*	*
	Glasgow	65	37	60·6	46·1	53·0	− 0·1	77	0	3	0·17	−0·75	35·8	+12·8	40	+15
	Ardrossan	67	39	61·7	49·3	55·2	+ 1·4	92	0	5	0·34	−0·51	*	*	*	*
	Glenlee Ş	70	30	63·1	41·2	51·6	− 1·0	71	2	2	0·31	−0·87	*	*	*	*
	Douglas (Isle of Man)	68	37	62·7	47·3	54·6	+ 0·5	88	0	2	0·04	−0·84	52·5	+20·3	59	+23
7. ENGLAND, N.W.	Stonyhurst	64	40	61·0	49·0	54·7	+ 0·3	89	0	2	1·01	−0·15	41·2	+12·7	46	+14
	Blackpool M	66	40	62·4	49·8	55·8	+ 1·1	97	0	2	0·13	−0·75	33·7	+ 5·6	38	+ 6
	Manchester	66	41	63·5	46·7	54·7	− 0·2	89	0	2	0·42	−0·48	30·2†	?	34†	?
	Liverpool Obsy. (Bidston)	76	45	66·1	50·4	57·9	+ 1·7	111	0	1	0·11	−0·64	*	*	*	*
	Llandudno M	67	45	64·0	52·0	57·7	+ 0·8	110	0	3	0·27	−0·43	33·5	+ 7·0	38	+ 9
	Holyhead	66	47	63·3	52·3	57·5	+ 0·7	109	0	1	0·03	−0·70	*	*	*	*
8. ENGLAND, S.W.	Llandovery	72	33	68·4	41·6	54·4	− 1·2	88	1	1	0·01	−1·09	*	*	*	*
	Pembroke	65	48	63·0	53·3	57·9	+ 1·1	111	0	0	—	−0·81	26·6	− 7·4	30	− 9
	Bristol (Montpelier)	73	41	67·7	47·5	57·1	+ 0·7	106	0	0	—	?				
	Arlington (N. Devon)	66	41	62·0	48·3	54·8	− 0·6	90	0	1	0·02	−1·09	*	*	*	*
	Cullompton M	72	36	66·3	43·7	54·5	− 1·1	88	0	0	—	−0·80	43·2	+11·2	49	+13
	Falmouth	68	50	63·3	53·7	58·3	+ 1·0	114	0	1	0·10	−1·00	35·8	+ 0·8	41	+ 1
	Plymouth	69	46	64·4	50·0	56·9	− 0·9	104	0	1	0·14	−0·74	45·0	+ 9·7	51	+10
	Prawle Point	69	48	64·7	52·4	58·3	+ 1·0	114	0	1	0·19	−0·38	*	*	*	*
9. IRELAND, N.	Malin Head	65	47	60·4	52·0	56·0	+ 2·2	98	0	5	0·45	?	*	*	*	*
	Londonderry	68	39	64·7	48·4	56·2	+ 1·9	99	0	4	0·28	−0·62	*	*	*	*
	Edenfel (Omagh)	66	36	62·9	46·0	54·0	+ 0·6	84	0	3	0·12	−0·71	*	*	*	*
	Belmullet	63	42	61·9	51·9	56·7	− 0·1	103	0	3	0·31	?	*	*	*	*
	Markree Castle	68	34	63·7	45·2	54·0	+ 0·7	84	0	4	0·10	−0·67	34·7	+12·5	39	+14
	Brookeborough	67	35	62·9	44·4	53·2	+ 0·6	78	0	1	0·15	−0·73	*	*	*	*
	Armagh	68	36	62·6	45·2	53·5	− 0·1	81	0	3	0·07	−0·65	38·6	+14·3	43	+15
	Donaghadee	71	43	63·4	50·9	56·9	+ 2·5	104	0	2	0·03	−0·68	*	*	*	*
	Edgeworthstown	66	35	62·0	44·5	52·8	− 0·7	76	0	1	0·06	−0·68	*	*	*	*
10. IRELAND, S.	Dublin	70	41	64·7	49·8	56·9	+ 1·2	104	0	1	0·01	−0·55	40·0	+ 9·6	45	+11
	Parsonstown	67	31	65·0	45·1	54·6	0·0	88	0	0	—	−0·75	32·6	+ 4·8	37	+ 6
	Kilkenny	71	38	65·7	47·3	56·1	+ 0·6	99	0	1	0·02	−0·71	*	*	*	*
	Waterford	69	39	65·5	48·3	56·5	+ 0·1	102	0	1	0·05	−0·78	*	*	*	*
	Roche's Point	66	47	63·7	52·6	57·9	+ 1·4	111	0	2	0·03	−0·94	*	*	*	*
	Valencia	67	41	63·9	50·9	57·1	+ 0·4	106	0	2	0·19	−0·89	30·9	+ 1·9	35	+ 2
	Killarney	66	36	63·5	46·7	54·7	− 1·0	89	0	3	0·15	?	*	*	*	*
	Foynes	67	40	64·5	50·5	57·2	+ 2·0	106	0	2	0·17	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	65	53	62·3	54·7	58·3	− 0·1	114	0	1	0·83	+0·04	*	*	*	*
	Jersey	77	52	67·9	56·1	61·7	+ 1·6	138	0	2	1·99	+1·29				

Stations marked M are in connection with the Royal Meteorological Society, and those marked Ş with the Scottish Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

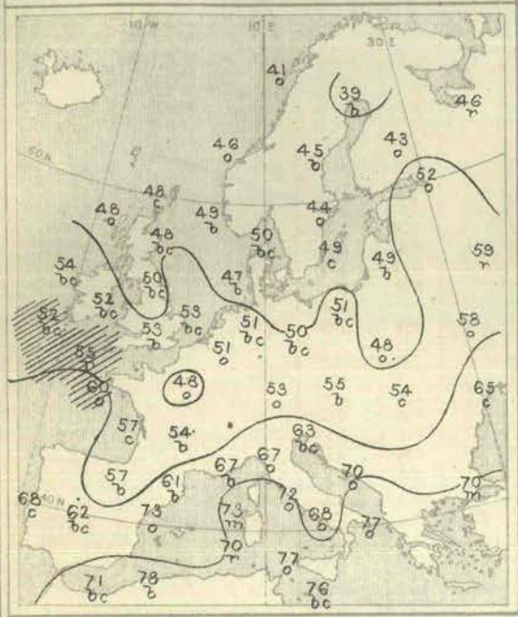
† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row) at the Kew Observatory, and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

‡ Dew.

Sunday, 10th September.

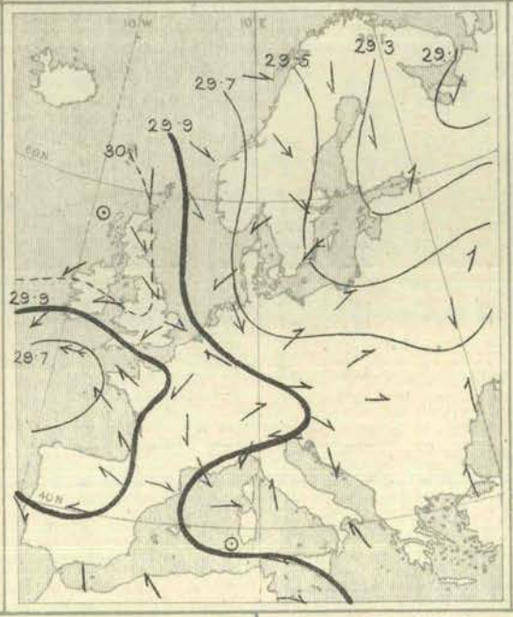
Temperature and Weather.

8 a.m.

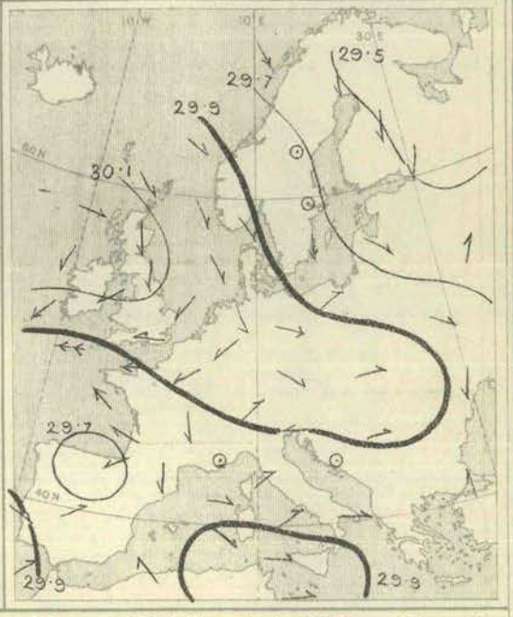


Barometer and Wind.

8 a.m.



6 p.m.



Weather fine over the greater part of our Islands, but dull and rainy on our extreme south-west coasts. Dull also over the north of France, south Germany, Italy, and the west of Norway, and rainy at several of the Russian stations; fine in Sweden, Denmark, and north Germany, as well as in Spain and the south of France. Heavy rain falling during day in the south-west of England and the north-west of France, and smaller amounts in Scandinavia and the north-east of Great Britain. Solar halo seen at Oxford in afternoon. Thunder and lightning occurring at some of the French stations.

Temperature fallen in most countries. Morning readings highest, 78° at Algiers, 77° at Brindisi, Palermo, and Oran, and 76° at Malta, above 70° at most of the Mediterranean stations, and above 65° on the coasts of the Spanish Peninsula. Lowest, (1) 36° at Ulcaborg, 39° at Haparanda, 41° at Bodö, and 43° at Kuopio; (2) 45° at Loughborough, and 46° at York and Cambridge (below 50° over the northern and central parts of the United Kingdom generally). Daily maxima very little above 60° in any part of our Islands, but thermometer exceeding 70° over southern Europe generally, and reaching 88° at Biarritz, and 91° at Palermo.

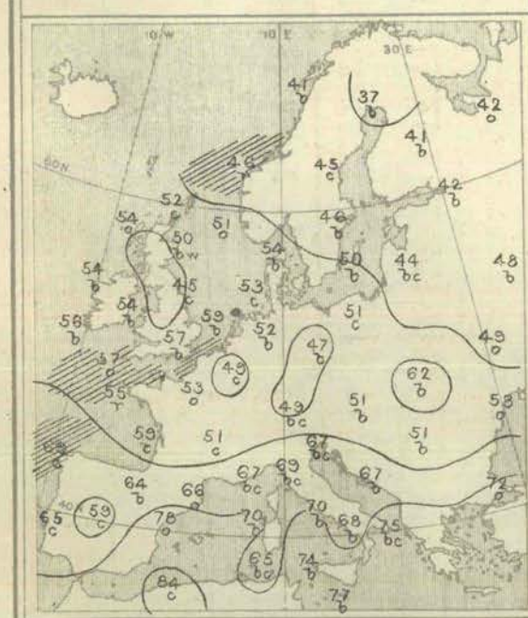
Wind South-Easterly in the west of France, and Easterly over Ireland, Wales, and the south of England, with a gale at the mouth of the Channel. Light from the North-Westward in the eastern parts of Great Britain; strong from the North-Westward or Northward in Scandinavia and Denmark, with gales at Faerder and Wisby, light from the Westward or South-Westward over Germany and Poland, and from the Southward over the central and southern parts of Russia. Variable in Spain, Italy, and Algeria. No important change occurring later, but Easterly gale at mouth of Channel increasing somewhat in strength. Northerly gale in south of Scandinavia subsiding quickly.

Barometer highest, 30·0 ins. and upwards in an anticyclone lying over the northern parts of the United Kingdom; 29·9 ins. and upwards over the greater part of France and Spain. Lowest, 29·1 ins. and less in a depression over the extreme north of Russia; 29·7 ins. and less in another system lying off the mouth of the Channel. Latter system subsequently moving south-eastwards, and anticyclone spreading southwards and eastwards.

Monday, 11th September.

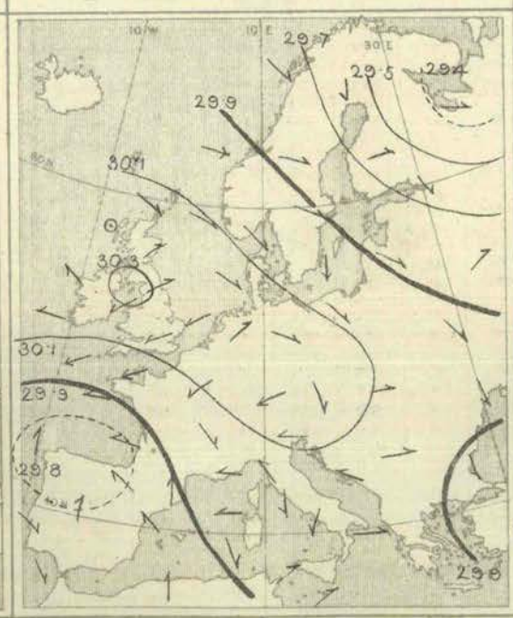
Temperature and Weather.

8 a.m.

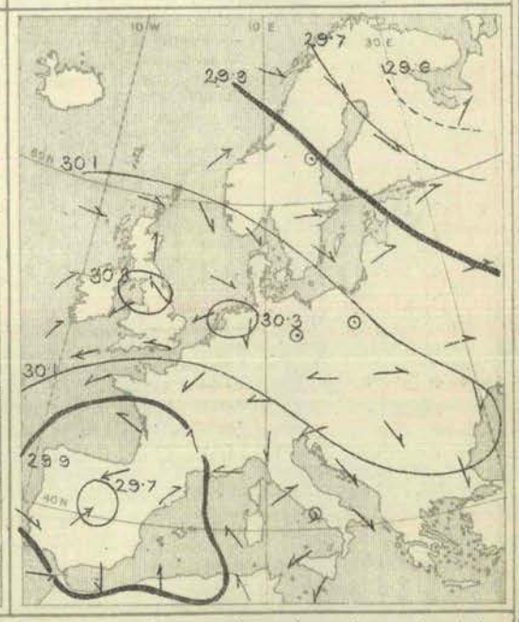


Barometer and Wind.

8 a.m.



6 p.m.



Weather fine over the greater part of our Islands and the Continent, but dull in the extreme north of Scotland and the west of Norway, with rain at Christiansund. Dull also over the south of Russia and the northern parts of France, and rainy at Brest. Considerable quantities of rain falling during day in the west of Norway, and still larger amounts in the north of Spain and the west and south of France. Thunderstorms occurring at many of the French stations.

Temperature risen in most of the western countries, but fallen elsewhere. Morning readings highest, 84° at Algiers, 78° at Barcelona, 77° at Malta, and 75° at Brindisi; above 65° over southern Europe generally. Lowest, (1) 37° at Haparanda, 40° at Ulcaborg and Helsingfors, and 41° at Bodö and Kuopio; (2) 45° at Shields and Loughborough; (3) 45° at Münster, Breslau, and Prague; below 50° in many parts of the central and north-western countries. Rising during day to 65° or a little above it in the central and southern parts of our Islands, to 70° or more in France, and to 80° or more in several parts of southern Europe, the highest reading of all being 88° at Palermo. Frost occurring over central England at night.

Wind Southerly or South-Easterly in the south of France and over the northern and central parts of Spain, Easterly or North-Easterly over the remainder of France and the greater part of Ireland and England; strong in force in the English Channel. Light from the Westward in the north and east of Scotland, moderate to fresh from the same quarter or from North-West over Scandinavia, Denmark, the Baltic, and the northern parts of Germany and Russia. Northerly in the south of Russia; variable in Austria, Italy, and Algeria. Subsequently shifting to the Southward or South-Westward in Ireland; no important change occurring elsewhere.

Barometer highest, 30·2 ins. to 30·3 ins. over all but the southern parts of our Islands, with the Netherlands, and the greater part of the North Sea. Lowest, 29·4 ins. and less in the neighbourhood of the White Sea; 29·8 ins. and less in a depression lying over the north of Spain, and the southern parts of the Bay of Biscay; 29·9 ins. and less in a shallow area over Asia Minor. No important change occurring over western Europe during day, but anticyclone spreading south-eastwards over the more central countries.

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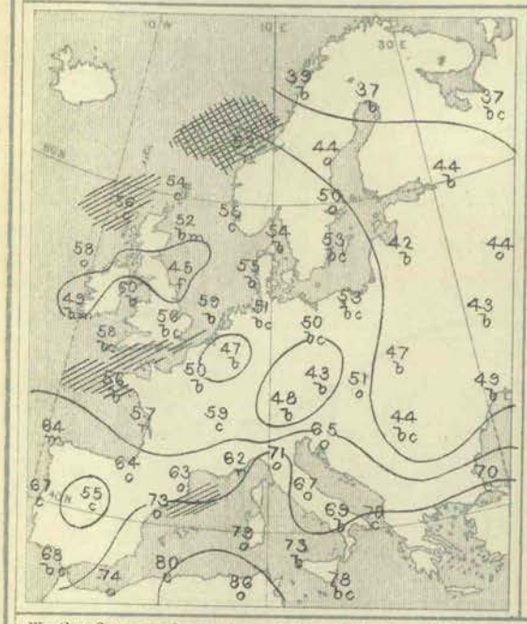
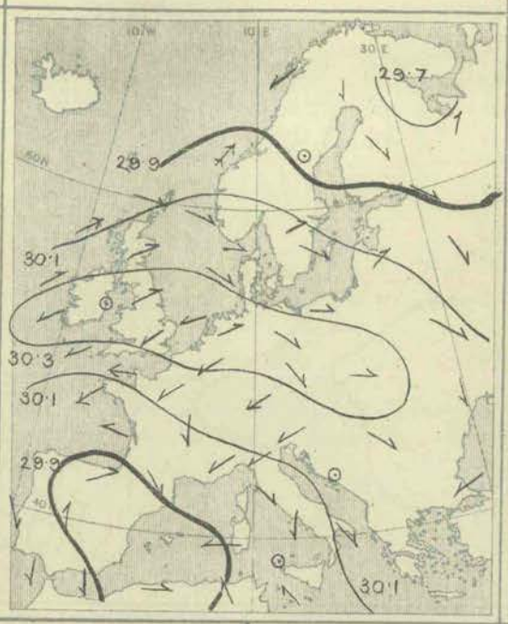
Tuesday, 12th September.

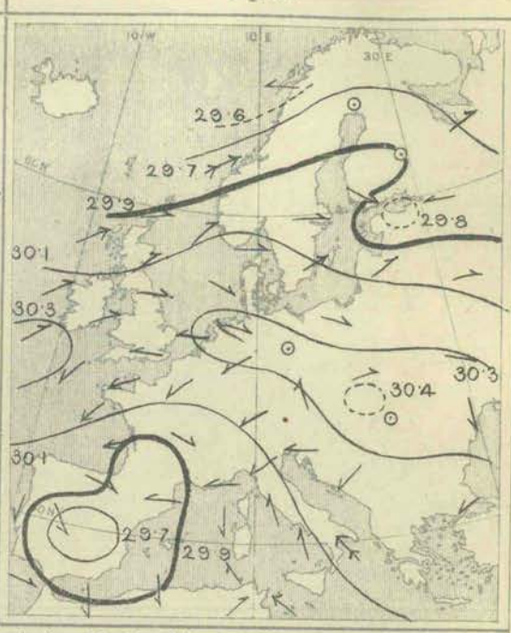
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fine over the greater part of our Islands and the Continent, but dull at several of the Scandinavian stations, with rain at Christiansund. Dull also over northern Italy; rainy in the south of France and at Rochefort. Rain setting in later over the extreme north and north-west of our Islands, amounts large in the Shetlands and also in the west of Norway. Thunderstorms and heavy rain occurring in evening over northern Italy, and lightning seen in the south of France.

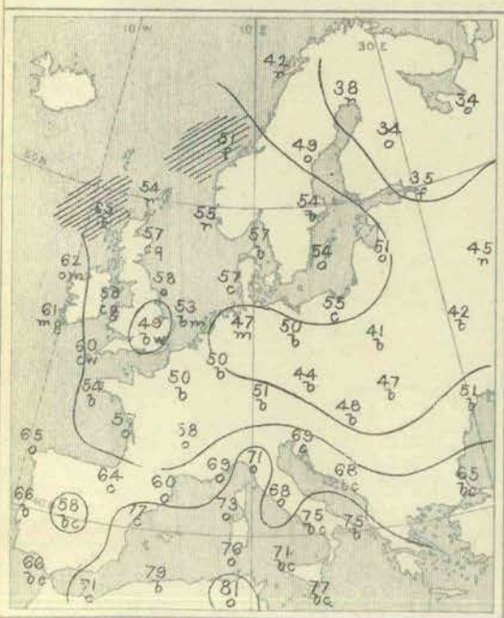
Temperature changed very irregularly, but risen a little in most countries. Morning readings highest, 86° at La Calle, 83° at Sfax, 80° at Algiers, and 79° at Cagliari, above 70° at most of the Mediterranean stations, and slightly above 60° in the Channel Islands and the extreme south-east of England. Lowest, (1) 37° at Archangel and Haparanda, and 39° at Bodö and Hernösand; (2) 40° at York and 41° at Loughborough; (3) 42° at Riga, Warsaw, and Breslau. Rising during day to between 65° and 68° over the central and southern parts of the United Kingdom, and to 75° or more over the greater part of southern Europe, the highest reading of all being 95° at Palermo. Night very cold over the central parts of Ireland and England.

Wind South-Westerly over the north of our Islands and the west of Norway, with a strong gale at Christiansund; light or moderate from West or North-West over Denmark, north Germany, Russia, and the Baltic. Easterly or North-Easterly over the Netherlands, western Germany, France, and the south of our Islands, and strong in force at the Channel stations, chiefly Northerly in Spain and Italy, variable in Algeria. South-Westerly wind freshening later on our extreme northern coasts; strong gale from North-West reported at Stornoway at night.

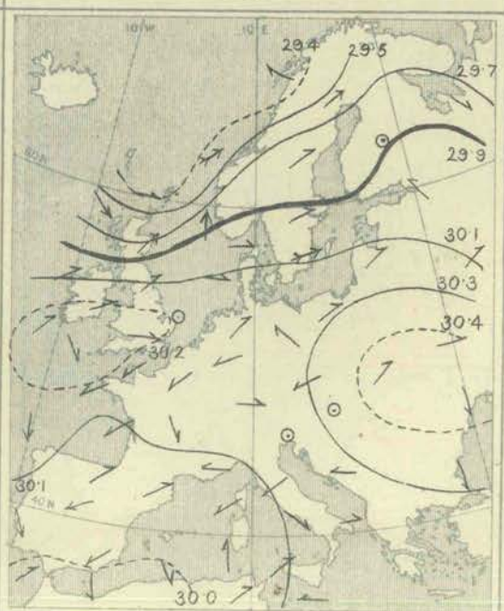
Barometer highest, 30·3 ins. and upwards in a long band stretching across Ireland, England, and the southern parts of the North Sea, to north Germany, Poland, and Galicia. Lowest, 29·7 ins. and less in a depression in the neighbourhood of the White Sea, 29·9 ins. and less over the north of Scandinavia, and also in a large shallow area over the south-west of France, the north-east of Spain, and the western parts of the Mediterranean. Anticyclone subsequently becoming reduced both in size and height, deep depression approaching the Norwegian coasts from the westward, and well-marked disturbance appearing over Spain.

Wednesday, 13th September.

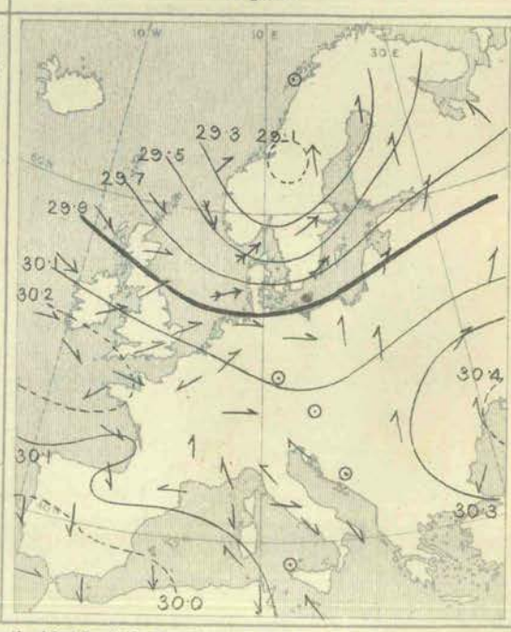
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fine over the south of England, the north of France, and the greater part of central, southern, and eastern Europe. Rainy in the extreme north and north-west of our Islands, as well as in Norway, the north of Sweden, and at Helsingfors and Moscow; dull in the south of France and the north of Italy, with rain at Florence. Heavy rain falling during day at the Scandinavian and northern Russian stations, and smaller quantities in Denmark, north Germany, and the northern parts of the United Kingdom. Solar halos seen in the south of England. Thunderstorm occurring at Toulon.

Temperature fallen in the south-eastern parts of England, but risen in most other localities. Morning readings highest, 85° at Sfax, 81° at La Calle, 79° at Algiers, and 78° at Cagliari; above 70° at the Mediterranean stations generally, and above 60° in the west of Ireland and the more central parts of Scotland. Lowest, 34° at Archangel and Kuopio, 35° at St. Petersburg, and 38° at Haparanda; below 45° over Poland and the south of Russia. Rising during day to between 65° and 70° at most of the English and Irish stations, exceeding 70° in France, and exceeding 80° in many parts of Spain and Italy. Night very mild over central England.

Wind North-Westerly in the north of Scotland, but South-Westerly over the northern parts of our Islands generally, as well as in Scandinavia, and strong in force in many places, with a gale at Wisby. Light from the Northward in the extreme south of England and the central parts of France, fresh to strong from the same quarter or from North-East in Spain. Light from the South-Eastward at several of the Austrian and Russian stations, and variable in Italy and Algeria. Subsequently veering to the Westward or North-Westward over the northern parts of our Islands generally and falling moderate. Westerly (South-Westerly to North-Westerly) gales springing up in Denmark and the south of Scandinavia.

Barometer highest, 30·4 ins. and upwards over Galicia and the south of Russia; 30·2 ins. and upwards over the southern parts of Ireland and England. Lowest, 29·4 ins. and less in a large and rather deep depression lying to the northward of our Islands and the westward of Norway; gradients steep over the northern parts of the North Sea. Depression subsequently moving eastwards; barometer rising briskly in the north of Scotland, but falling quickly in Scandinavia.

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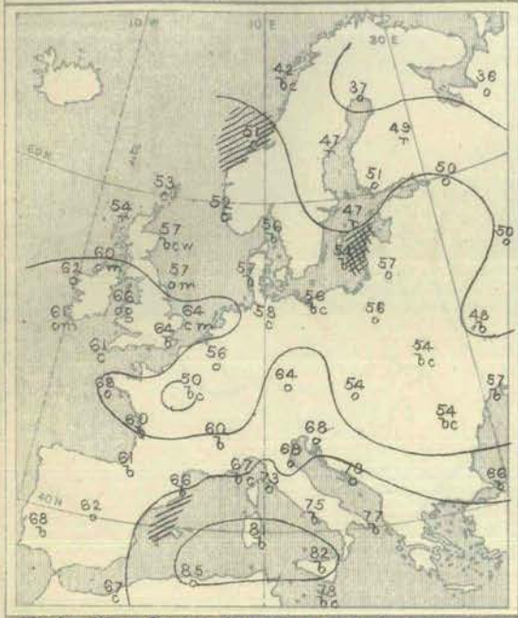
Thursday, 14th September.

Temperature and Weather.

8 a.m.

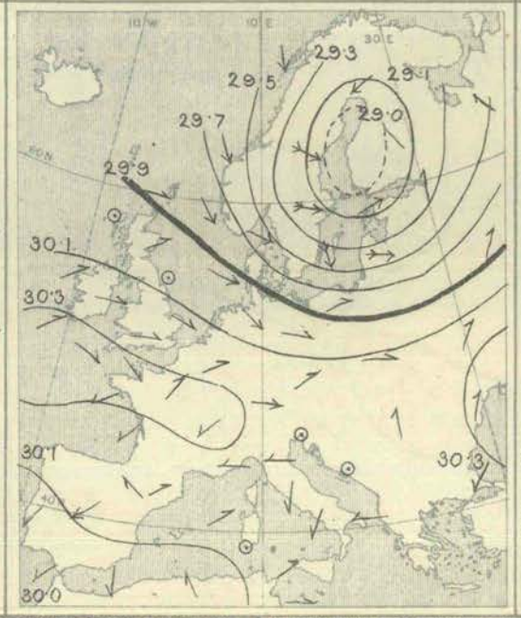


Weather fair or fine over the greater part of western, southern, and south-eastern Europe, but dull at several of our own western and northern stations, with rain at Stornoway. Dull over Poland and central Russia, rainy in Finland, Sweden, and many parts of Germany. Heavy rain setting in at night in the Shetlands, Hebrides, and west of Norway, and smaller quantities reported in the extreme north and north-west of our Islands generally. Bright aurora seen at Wick.

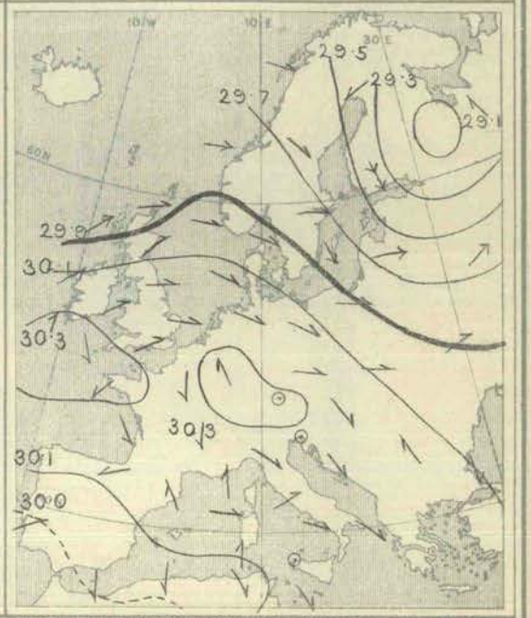
Temperature fallen a little in Scandinavia and the northern parts of the United Kingdom, risen elsewhere—quickly over England and Germany. Morning readings highest, 85° at Algiers, 82° at Palermo, and 81° at Cagliari, above 70° at most of the Mediterranean and Adriatic stations, and varying between 60° and 65° over the greater part of Ireland and England. Lowest, 36° at Archangel, 37° at Haparanda, 42° at Bodö, and 47° at Hernösand and Stockholm. Rising during day to 70° or more at several of the English and Irish stations, and reaching 76° in London and at Oxford. Exceeding 80° in many parts of southern Europe, the highest readings of all being 103° at Gap and 91° at Croisette and Palermo.

Barometer and Wind.

8 a.m.



6 p.m.



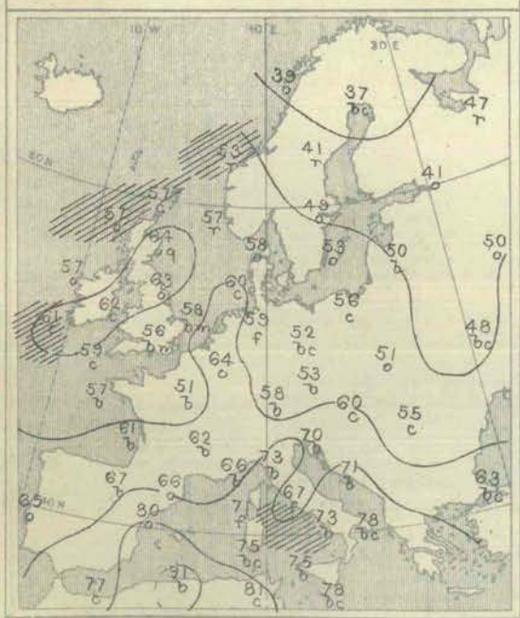
Wind light to moderate from the Westward (South-West to North-West) over our Islands, the Netherlands, and Germany. Strong from the North-Westward in Scandinavia and Denmark, with gales in Sweden; strong to a gale from the South-Westward over the Gulf of Finland, Easterly or North-Easterly over Lapland and the extreme north of Russia. Light to moderate, North-Easterly over Italy, Spain, and the Bay of Biscay, variable over the central and southern parts of France, and also in Algeria. Subsequently backing to the South-Westward in the extreme north and north-west of our Islands, and blowing strongly in the Hebrides. Gale in Sweden subsiding gradually.

Barometer highest, 30·3 ins. and upwards in an anticyclone extending from the Atlantic over the extreme south-west of our Islands and north-western and central France, as well as in another system lying over the Black Sea and the south of Russia. Lowest, 29·0 ins. and less in a rather deep depression having its centre over western Finland; gradients steep over northern Europe generally. New disturbance beginning to approach our northern coasts later from the westward, and barometer falling rather decidedly in the north of Scotland. Depression over Finland travelling steadily eastwards.

Friday, 15th September.

Temperature and Weather.

8 a.m.

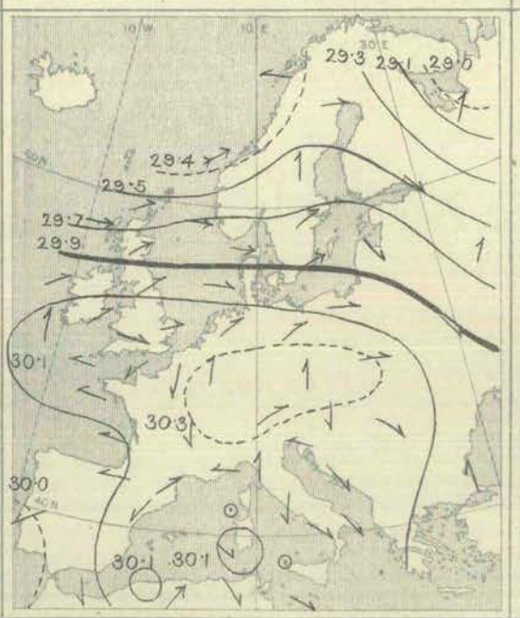


Weather fine and bright in the south and east of England, as well as over France and the greater part of central and southern Europe. Cloudy or dull over the more northern parts of our Islands and the Continent, with showers on our extreme north-west coasts, and with steady rain in the west of Norway, as well as at Hernösand and Archangel. A little rain falling during day in Ireland and the west and north of Scotland, and larger amounts at several of the Scandinavian stations. Thunder and lightning occurring in some parts of France.

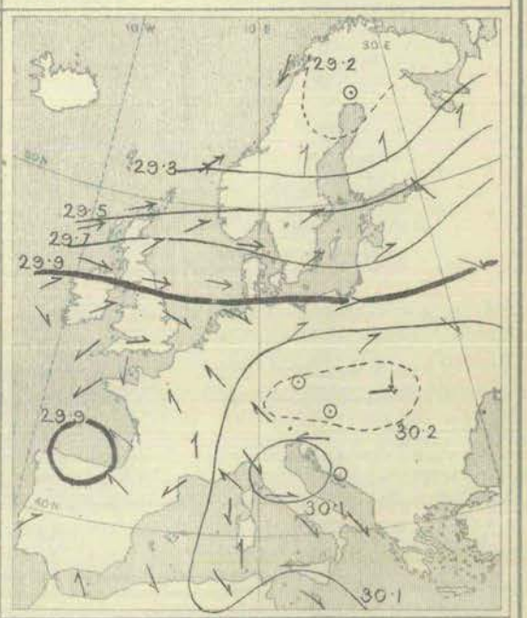
Temperature changed rather irregularly. Morning readings highest, 91° at Algiers, 81° at La Calle, 80° at Barcelona, and 78° at Brindisi and Malta; above 70° over the Mediterranean and Adriatic generally, and above 60° in many parts of the United Kingdom. Lowest, 37° at Haparanda, 38° at Helsingfors, 39° at Bodö and Ulleaborg, and 41° at Hernösand and St. Petersburg. Rising during day to between 70° and 75° in many parts of Great Britain, and reaching 77° at Jersey. Exceeding 80° at most of the French, Spanish, and Italian stations, the highest reading of all being 95° at Palermo.

Barometer and Wind.

8 a.m.



6 p.m.



Wind Westerly or South-Westerly over the greater part of our Islands, Scandinavia, Denmark, Germany, and the Netherlands. Light or moderate in force generally, but very strong in the north of Scotland, and blowing a hard gale from South-West at Christiansund. Light to moderate from the Eastward over Spain and the west and south of France, and from the North-Eastward at some of the Channel stations. Northerly or North-Westerly in Italy and Austria, variable in Algeria. Subsequently increasing to a fresh gale from the Westward in the extreme north of Scotland and also over the Christiania Fiord. No important change occurring elsewhere.

Barometer highest, 30·1 ins. to 30·4 ins. in a large anticyclone covering most of the central and southern countries and extending westwards over England and Ireland. Lowest, 29·0 ins. and less in a depression over the extreme north of Russia; 29·4 ins. and less in another disturbance approaching the west of Norway. Latter system subsequently moving eastwards, shallow depression appearing over the Bay of Biscay in evening.

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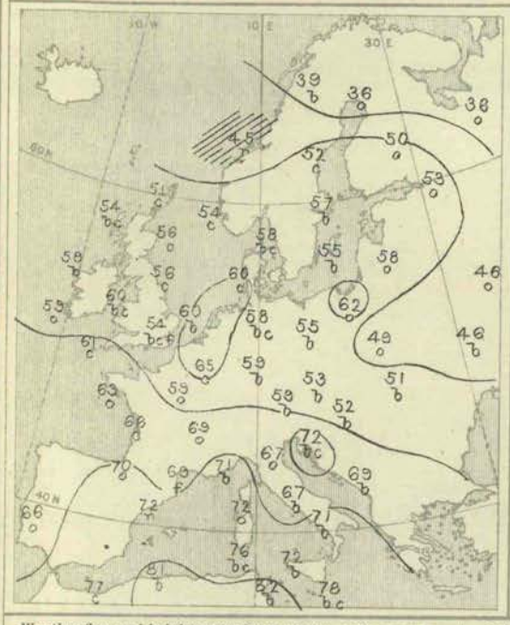
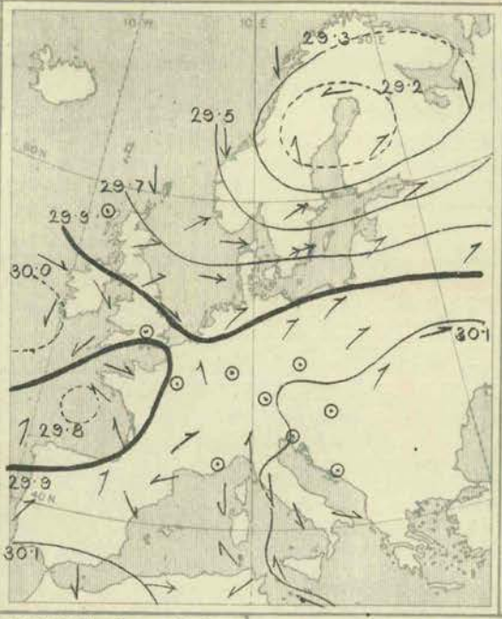
Saturday, 16th September.

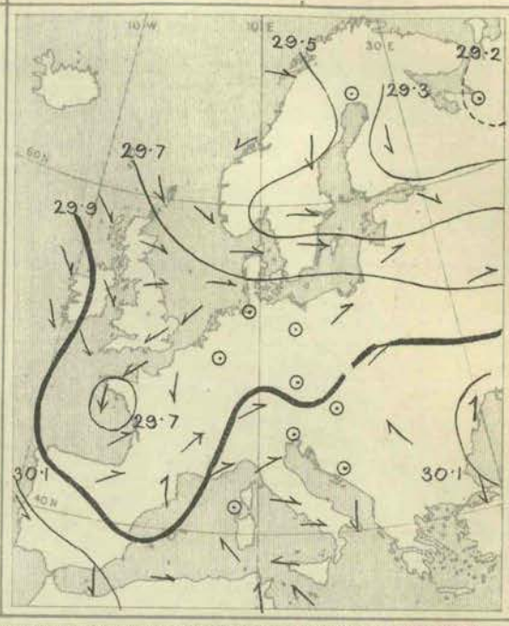
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fine and bright over the northern and eastern parts of the United Kingdom, and also in Denmark, the south of Scandinavia, and the greater part of central, southern, and eastern Europe. Misty or foggy in the south of England, with rain at Jersey; dull in the south of Ireland and in France. Large quantities of rain falling later in the Channel Islands and in many parts of France, Germany, and the Netherlands, the heaviest amounts measured next morning being 1·9 ins. at Jersey and 1·7 ins. at Dunkirk and Cape Gris Nez. Thunderstorms occurring at some of the French stations.

Temperature risen in France and Sweden, but fallen in most other countries. Morning readings highest, 82° at Tunis, 81° at Algiers, 79° at Aumale, and 78° at Malta; above 70° at most of the Mediterranean and Adriatic stations, and above 60° on some parts of our own south and south-east coasts. Lowest, 36° at Archangel and Haparanda, 39° at Bodö and Uleaborg, and 45° at Christiansund and Kharkov, below 50° at nearly all the Russian stations and also over central England. Rising during day to 65° or more in several parts of the United Kingdom. Exceeding 75° in France, and exceeding 80° in many parts of southern Europe.

Wind Westerly over all the more northern parts of the United Kingdom, as well as over Denmark, north Germany, the Baltic, the south of Scandinavia, and the greater part of Russia; fresh gales from West-South-West reported at Wisby and Faerder. Light from the North-Eastward in Lapland, moderate to strong from the Northward in the west of Norway, Southerly or South-Easterly in Spain and the west of France; Northerly or North-Easterly in the extreme south of our Islands. Calm in Austria and south Germany; Northerly or North-Westerly in Italy; variable in Algeria. Subsequently veering to the South-Westward in the west of France; gales in south of Scandinavia subsiding.

Barometer highest, 30·0 ins. to 30·2 ins. over nearly the whole of central, southern, and south-eastern Europe, as well as in the south-west of Ireland. Lowest, 29·2 ins. and less in a depression over the Gulf of Bothnia and the neighbouring parts of Sweden and Finland, 29·3 ins. and less in a shallow system over the Bay of Biscay. Former disturbance subsequently travelling eastwards; latter system advancing slowly in a North-Easterly direction across France.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force is indicated thus: ⟿ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze: and ⊙ = a calm. In the left-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Germany, Sweden, and Norway, and 7 a.m. in France, Algeria, Italy, Austria, and Russia; that for 6 p.m. is prepared from observations made at 6 p.m. in the British Islands and France, 7 p.m. in Algeria, 8 p.m. in Sweden and Norway, Germany, and Austria, and 9 p.m. in Russia, Belgium, and Italy. The time indicated in each case is the standard time for each country.

GENERAL NOTES.

At the beginning of the week the highest pressures were found over the northern parts of the United Kingdom, and the lowest in the extreme north of Russia, a well-marked depression being at the same time located near the mouth of the English Channel, where a strong Easterly gale was blowing with heavy rain. The depression soon moved away, however, to the southward, while the high-pressure system in the north spread southwards and eastwards until it embraced the greater part of western and central Europe. A series of large depressions now advanced over Scandinavia from the westward, and freshening Westerly winds gradually spread over all the more northern parts of Europe, with heavy falls of rain in Scandinavia and the north of Scotland. Towards the close of the week the anticyclone moved away to the eastward, while a shallow depression advanced in a north-easterly direction from Spain to the north-west of France. The passage of the disturbance was accompanied by heavy rain over France and the English Channel, with thunderstorms in many places.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 218.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	37·1	?	42	?	EASTBOURNE	45·3	?	51	?
OSWALDKIRK (Yorkshire)	41·7	?	47	?	TENBY	33·6*	?	38*	?
WORKSOP	34·5	+ 8·3	39	+10	NEWQUAY				
THURCASTON (Leicestershire)	47·0	+21·0	53*	+23	TORQUAY	53·1*	?	60*	?
MARGATE	41·1	?	47	?	ARLEY COTTAGE (County Cavan)	31·2	?	35	?
WESTBOURNE (Sussex)	57·8*	?	66*	?	GUERNSEY	43·5*	?	49*	?
BRIGHTON									

* The values at Westbourne, Tenby, Torquay and Guernsey are obtained by Jordan's Photographic Recorder.

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WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE. 63, VICTORIA STREET, LONDON, S.W.; R. H. SCOTT, F.R.S., SECRETARY.

By whom Subscriptions, payable in advance, can be received.

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VOL. X. No. 38.] *Third Series.* WEEK ENDING SATURDAY, 23RD SEPTEMBER, 1893. [*Price 6d.* *Annual Subscription, post paid*, £1 10*s.* 0*d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871-90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the twenty-five years 1866-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the ten years 1881-90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

	DISTRICTS. (See p. 224.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 1st, 1893. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	**0.** SCOTLAND, NORTH	60	29	52·2	42·0	46·9	4 below.	34	−27	0	− 2	2127*	+556	485	− 57
	1. SCOTLAND, EAST	65	31	55·0	42·6	48·5	3 below.	46	−26	0	− 2	2366	+353	548	− 22
	2. ENGLAND, N.E.	68	33	58·0	44·4	50·9	2 below.	62	−18	0	− 1	2571	+425	436	− 62
	3. ENGLAND, EAST	70	35	61·6	45·7	53·3	2 below.	79	−13	0	0	2976	+479	524	− 37
	4. MIDLAND COUNTIES	69	32	60·9	43·8	51·9	2 below.	69	−18	0	− 2	3084	+630	505	− 49
	5. ENGLAND, SOUTH	68	37	61·1	48·2	54·4	2 below.	87	−14	0	0	3237	+549	373	− 43
Principal Grazing, &c., Districts.	**6.** SCOTLAND, WEST	61	29	56·2	43·5	49·6	3 below.	53	−22	0	− 1	2554	+493	354	− 63
	7. ENGLAND, N.W.	64	37	57·3	47·7	52·2	2 below.	71	−12	0	0	2930	+689	323	− 91
	8. ENGLAND, S.W.	69	30	59·6	46·8	52·9	2 below.	76	−16	0	0	3171	+689	246	− 70
	9. IRELAND, NORTH	64	34	56·0	44·8	50·1	3 below.	57	−22	0	0	2762	+560	258	−104
	10. IRELAND, SOUTH	67	28	57·9	43·0	50·1	5 below.	57	−31	0	0	3085*	+609	178	−100
	—CHANNEL ISLANDS	66	45	60·4	52·6	56·3	2 below.	100	−12	0	0	3567	+808	70	− 52

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 224.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the mean for the Week.	From Jan. 1st, 1893. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 1st, 1893. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of ins.			Ins.	Ins.								
Principal Wheat-producing Districts.	**0.** SCOTLAND, NORTH	7	25	14 more.	170	− 1	32·8	+ 0·1	15	− 2	18	− 2	894	− 98	25	− 3
	1. SCOTLAND, EAST	5	12	5 more.	136	− 5	18·6	− 3·7	18	0	22	0	1174	+ 20	33	+ 1
	2. ENGLAND, N.E.	4	4	2 less.	115	−15	14·1	− 4·3	34	+11	40	+ 15	1312	+257	37	+ 7
	3. ENGLAND, EAST	3	1	5 less.	111	−16	12·8	− 5·4	28	− 4	33	− 2	1554	+273	44	+ 8
	4. MIDLAND COUNTIES	4	2	5 less.	109	−16	13·4	− 6·8	32	+ 3	38	+ 8	1472	+529	42	+ 9
	5. ENGLAND, SOUTH	5	5	2 less.	106	−15	13·6*	− 5·3	23	− 8	27	− 8	1604*	+360	46	+ 10
Principal Grazing, &c., Districts.	**6.** SCOTLAND, WEST	6	8	3 less.	134	−15	24·9	− 9·3	29	+ 2	34	+ 4	1333	+191	38	+ 6
	7. ENGLAND, N.W.	7	12	3 more.	123	−13	19·2	− 4·5	25	0	29	0	1316	+182	37	+ 5
	8. ENGLAND, S.W.	6	8	2 less.	111	−28	20·5	− 6·8	26	− 7	31	− 5	1690*	+339	48	+ 9
	9. IRELAND, NORTH	7	11	3 more.	146	−15	23·0	− 2·3	31	+ 7	36	+ 9	1142	+102	32	+ 3
	10. IRELAND, SOUTH	5	6	2 less.	126	−21	21·1	− 6·3	35	+ 7	41	+ 9	1286*	+ 77	37	+ 3
	—CHANNEL ISLANDS	7	16	9 more.	117	−30	18·0	− 3·8	24	−13	28	− 16	1984*	+398	57	+ 11

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather during this period became cold and unsettled, especially in the northern and north-western parts of the Kingdom, where heavy rain was experienced, with sleet or snow towards the end of the week. In most other localities the rainfall was comparatively slight, but, in the Channel Islands, where an appreciable quantity was measured daily, the aggregate fall was large. Thunder and lightning occurred over southern England during the middle or latter part of the week.

Temperature was below the mean, the deficit ranging from 2° in most parts of England to 3° or 4° in Scotland and to 5° in Ireland S. The highest of the maxima, which occurred during the early days of the week, ranged from 70° in England E., to 61° in Scotland W., and 60° in Scotland N. Later in the week the daily maxima were very low, the thermometer at some stations not reaching 50°. The lowest of the minima were recorded between the 21st and 23rd, and ranged from 29° to 31° in Scotland, from 28° to 34° in Ireland, and from 30° to 37° in England. In the Channel Islands the lowest reading was 45°.

Rainfall was greatly in excess of the mean in Scotland N. and the Channel Islands, and considerably in excess in Scotland E., England N.W., and Ireland N.; in all other districts, however, there was again a deficit.

Bright Sunshine was much less prevalent than during the preceding week, but still exceeded the normal in Ireland, Scotland W., the Midland Counties, and England N.E. The percentage of the possible amount of duration ranged from 41 in Ireland S., and 40 in England N.E., to 27 in England S., 22 in Scotland E., and to 18 in Scotland N.

Barometer and Wind.—During nearly the whole of this week the centre of a rather deep depression moved very slowly eastwards from the Atlantic over the Hebrides and Shetlands causing at first fresh or strong winds from the Westward in all parts of the Kingdom, and subsequently gales from the North-Westward or Northward in Scotland, and fresh or strong winds from similar directions over England and Ireland. In addition to this disturbance, a small local system existing off our south-west coasts on the 20th produced a severe but brief gale in the Scilly Islands.

* This value has been altered owing to the receipt of further information for a preceding week.

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II.—DATA from which the SUMMARY on page 223 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°				Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	54	35	52·0	42·4	47·0	- 2·7	35	0	7	2·27	+1·47	*	*	*	*
	Stornoway	58	34	52·0	42·7	47·1	- 2·9	36	0	7	2·98	+2·00	21·8	- 2·5	26	- 2
	Wick	59	30	52·3	42·6	47·2	- 3·5	36	0	7	2·70	+2·10	*	*	*	*
	Lairg Ⓢ	58	29	51·3	40·3	45 5	- 4·6	32	5	7	2·36	+1·58	*	*	*	*
	Glencarron Ⓢ	55	31	50·3	39·6	44·7	- 4·9	29	7	7	4·55	+2·90	*	*	*	*
	Fort Augustus Ⓢ	60	34	53·8	42·5	47·9	- 3·4	41	0	7	1·18	+0·26	10·5	?	12	?
	Fort William Ⓢ	60	33	53·6	44·0	48·6	- 3·3	46	0	6	1·28	-0·34	13·7	?	16	?
1. SCOTLAND, E.	Nairn	63	33	54·6	43·7	48·9	- 2·8	48	0	6	1·84	+1·24	*	*	*	*
	Aberdeen	65	35	55·9	45·1	50·2	- 1·6	57	0	6	1·72	+1·02	25·7	+ 0·4	30	0
	Braemar Ⓢ	58	31	50·2	39·8	44·8	- 3·5	29	6	7	2·64	+1·82	13·7†	?†	16†	?†
	Ochtertyre Ⓢ	65	32	57·1	41·0	48·7	- 2·9	51	3	3	0·37	-0·48	*	*	*	*
	Leith	63	35	57·0	44·0	50·2	- 3·3	57	0	5	0·22	-0·29	*	*	*	*
	Marchmont Ⓢ	62	32	55·3	41·7	48·2	- 2·9	45	1	4	0·35	-0·42	20·3	?	24	?
2. ENGLAND, N.E.	Alnwick Castle	61	34	55·0	43·3	48·9	- 2·6	48	0	5	1·08	+0·43	*	*	*	*
	Durham	66	33	59·0	41·5	49·8	- 2·6	57	1	4	0·31	-0·26	39·4	+16·4	46	+19
	Shields	65	34	57·7	44·4	50·7	- 2·3	61	0	4	0·38	-0·24	*	*	*	*
	Scarborough Ⓜ	65	37	59·1	45·5	52·0	- 1·8	70	0	3	0·28	-0·38	*	*	*	*
	York	65	36	58·7	43·4	50·7	- 3·1	61	0	4	0·18	-0·44	31·6	+ 6·8	37	+10
	Spurn Head	68	42	?58·6	48·1	?53·1	? - 2·1	?78	0	2	0·10	-0·39	*	*	*	*
3. ENGLAND, E.	Hillington Ⓜ	69	35	61·5	44·0	52·3	- 2·1	72	0	3	0·07	-0·56	31·5	+ 4·5	37	+ 5
	Yarmouth	69	40	60·4	48·4	54·1	- 1·5	85	0	3	0·13	-0·57	*	*	*	*
	Geldeston	70	39	62·5	45·9	53·8	- 1·4	83	0	1	0·09	-0·51	27·5	- 5·5	32	- 6
	Cambridge	69	37	62·6	44·4	53·1	- 2·1	78	0	3	0·13	-0·39	24·7	- 5·4	29	- 6
	Rothamsted	68	38	61·0	45·9	53·1	- 1·0	78	0	3	0·29	-0·36	27·6	?	32	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	67	34	60·3	41·4	50·4	- 3·5	61	2	4	0·41	-0·19	*	*	*	*
	Loughborough	69	34	62·9	44·4	53·2	- 1·5	78	0	4	0·12	-0·53	*	*	*	*
	Stamford (Ketton Hall)	68	38	62·1	45·0	53·1	- 1·5	78	0	5	0·24	-0·46	*	*	*	*
	Cheadle Ⓜ	63	37	57·0	43·7	50·0	- 2·5	56	0	4	0·26	-0·50	*	*	*	*
	Churchstoke Ⓜ	66	33	59·9	42·1	50·6	- 1·9	60	0	6	0·38	-0·27	37·9	+10·3	45	+13
	Hereford Ⓜ	68	34	62·1	44·6	52·9	- 1·5	76	0	3	0·11	-0·55	*	*	*	*
	Cirencester	65	32	60·6	41·9	50·8	- 2·5	62	0	2	0·13	-0·63	32·6	+ 6·3	38	+ 7
	Oxford	67	39	62·3	46·9	54·2	- 0·8	85	0	3	0·14	-0·51	29·5	+ 0·5	35	0
5. ENGLAND, S.	London	67	40	60·9	47·9	54·1	- 2·2	85	0	3	0·10	-0·48	20·9†	- 3·4†	25†	- 3†
	North Foreland	67	42	60·1	49·6	54·6	- 2·2	88	0	4	0·30	?	*	*	*	*
	Strathfield Turgiss Ⓜ												*	*	*	*
	Dungeness	67	41	61·4	49·9	55·4	- 1·4	94	0	6	0·82	+0·17	*	*	*	*
	Hastings (St. Leonards)	67	39	61·2	47·1	53·8	- 3·5	83	0	6	0·82	+0·14	22·2	-13·2	26	-15
	Southampton	68	39	63·6	48·1	55·5	- 1·0	95	0	5	0·26	-0·49	27·6	- 5·4	32	- 5
	Hurst Castle	66	41	62·1	49·7	55·6	- 1·2	95	0	4	0·18	-0·53	*	*	*	*
	Stowell Ⓜ	64	37	58·6	45·6	51·8	- 2·3	69	0	6	0·64	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	59	35	55·3	43·2	49·0	- 3·3	49	0	7	1·71	+0·06	*	*	*	*
	Glasgow	59	34	54·0	43·3	48·4	- 3·3	45	0	5	0·67	-0·25	20·7	- 0·5	24	- 1
	Ardrossan	59	37	56·4	46·9	51·4	- 2·1	66	0	5	0·43	-0·45	*	*	*	*
	Glenlee Ⓢ	61	29	56·4	40·5	48·1	- 3·4	49	4	6	0·40	-0·85	*	*	*	*
	Douglas (Isle of Man)	61	37	59·0	43·8	51·0	- 2·0	63	0	6	0·82	-0·08	37·8	+ 7·8	44	+ 9
7. ENGLAND, N.W.	Stonyhurst	60	38	54·6	44·3	49·2	- 3·8	50	0	7	1·34	+0·15	31·0	+ 4·6	36	+ 5
	Blackpool Ⓜ	64	42	59·9	49·4	54·4	+ 0·9	87	0	6	1·11	+0·23	27·4	+ 1·4	32	+ 1
	Manchester	61	37	56·5	44·4	50·2	- 3·2	57	0	6	1·57	+0·66	21·1†	?	25†	?
	Liverpool Obsy. (Bidston)	62	41	57·0	48·1	52·3	- 2·5	72	0	7	1·27	+0·44	*	*	*	*
	Llandudno Ⓜ	62	44	57·6	49·3	53·3	- 2·3	79	0	7	1·44	+0·70	20·3	- 2·9	24	- 4
	Holyhead	62	45	57·9	50·4	54·0	- 1·6	84	0	6	0·19	-0·59	*	*	*	*
8. ENGLAND, S.W.	Llandovery	64	30	60·3	40·9	50·1	- 4·3	61	3	7	0·76	-0·37	*	*	*	*
	Pembroke	62	44	57·9	50·6	54·1	- 1·5	85	0	4	0·28	-0·61	27 9	- 3·1	33	- 3
	Bristol (Montpelier)	66	39	62·1	46·7	54·0	- 0·6	84	0	4	0·54	?				
	Arlington (N. Devon)	61	38	57·1	46·1	51·3	- 3·0	65	0	7	1·47	+0·35	*	*	*	*
	Cullompton Ⓜ	66	33	61·1	45·2	52·8	- 1·6	76	0	6	0·75	-0·13	24·8	- 4·2	29	- 6
	Falmouth	66	44	59·4	49·4	54·2	- 1·9	85	0	7	0·75	-0·45	31·7	+ 0·5	37	0
	Plymouth	65	38	59·4	46·8	52·8	- 3·5	76	0	6	1·12	+0·22	21·3	-11·0	25	-14
	Prawle Point	69	41	59·3	48·6	53·7	- 2·4	82	0	6	0·75	+0·11	*	*	*	*
9. IRELAND, N.	Malin Head	58	41	53·4	48·1	50·6	- 1·9	60	0	7	1·35	?	*	*	*	*
	Londonderry	61	40	57·0	45·0	50·7	- 2·1	61	0	7	1·47	+0·57	*	*	*	*
	Edenfel (Omagh)	60	36	54·6	43·3	48·7	- 3·2	47	0	7	1·14	+0·29	*	*	*	*
	Belmullet	61	43	55·1	48·0	51·4	- 4·3	66	0	7	2·15	?	*	*	*	*
	Markree Castle	62	39	55·8	44·1	49·7	- 2·8	54	0	7	1·40	+0·65	26·7	+ 5·7	31	+ 6
	Brookeborough	61	34	56·6	41·3	48·6	- 2·7	49	2	6	0·78	-0·12	*	*	*	*
	Armagh	60	36	56·8	42·3	49·2	- 3·1	50	0	6	0·28	-0·35	33·7	+10·6	40	+12
	Donaghadee	64	34	58·3	46·0	51·9	- 1·4	69	0	7	0·27	-0·43	*	*	*	*
	Edgeworthstown												*	*	*	*
10. IRELAND, S.	Dublin	64	38	57·8	44·7	50·9	- 3·6	62	0	4	0·19	-0·36	38·6	+10·1	45	+12
	Parsonstown	63	31	57·6	39·9	48·3	- 4·7	53	6	5	1·41	+0·67	30·7	+ 4·5	36	+ 6
	Kilkenny	65	28	57·1	40·3	48·3	- 6·0	51	5	5	0·30	-0·36	*	*	*	*
	Waterford	67	30	60·0	41·7	50·4	- 4·9	60	1	5	0·26	-0·52	*	*	*	*
	Roche's Point	65	38	59·3	46·1	52·4	- 2·9	73	0	1	0·02	-0·90	*	*	*	*
	Valencia	61	38	57·1	47·1	51·9	- 3·9	69	0	7	0·83	-0·22	35·4	+ 8·6	42	+10
	Killarney	63	31	57·4	40·0	48·3	- 6·3	53	6	7	0·91	?	*	*	*	*
	Foynes	60	?37	?56·8	?43·8	?50·0	? - 3·8	?56	0	5	1·01	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	65	46	59·1	53·0	55·9	- 1·6	97	0	7	1·68	+0·85	*	*	*	*
	Jersey	66	45	61·7	52·1	56·7	- 2·3	103	0	7	1·57	+0·84	25·0	-13·0	29	-16

Stations marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

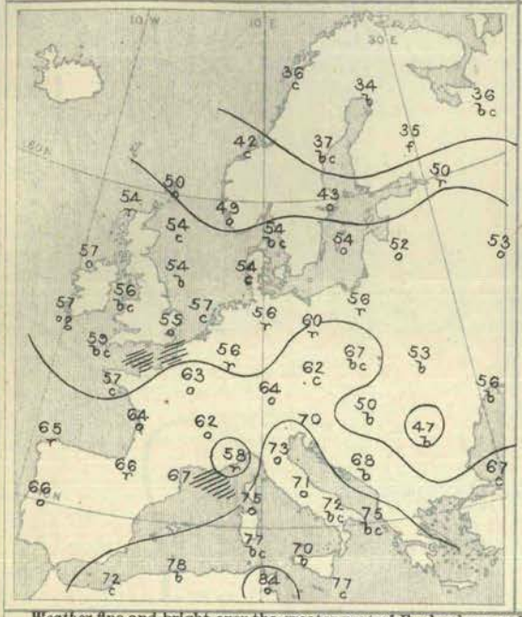
* An asterisk is inserted in all places for which the information is not usually received.

† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row) at the Kew Observatory, and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

Sunday, 17th September.

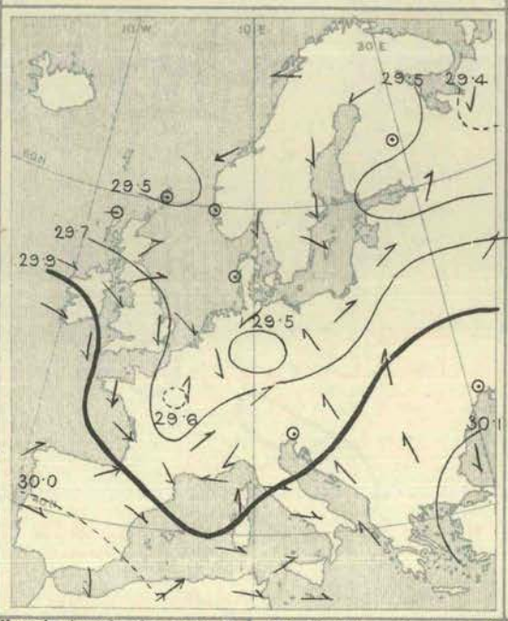
Temperature and Weather.

8 a.m.

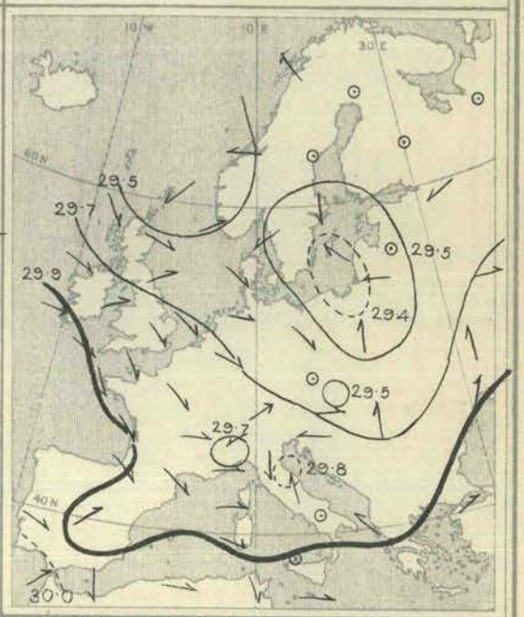


Barometer and Wind.

8 a.m.



6 p.m.



Weather fine and bright over the greater part of England, as well as in Austria, the south of Russia and Italy, and at many of the Scandinavian stations. Cloudy or overcast elsewhere, with rain in the extreme north-west of our Islands, and also over the Netherlands, north Germany, the Baltic, the Gulf of Finland, the south of France, and the north of Spain. Showers falling during day in the western and northern parts of our Islands generally, and heavy rain at some of the Swedish and German stations, as well as in many parts of Italy. Lightning occurring at Biarritz and a thunderstorm at Neufahrwasser.

Temperature risen over central England, as well as in Germany, Austria, and Italy, but fallen elsewhere. Morning readings highest, 84° at Tunis, 81° at Sfax, 78° at Algiers, and 77° at Cagliari and Malta, above 70° at most of the Italian stations, and above 65° in Spain and the south of France. Lowest, 33° at Ulleaborg, 34° at Haparanda, 35° at Kuopio, 36° at Archangel, and 37° at Hernösand. Rising during day to between 66° and 69° at some of our own central and southern stations, but remaining below 60° on our extreme west and north coasts. Exceeding 70° over southern Europe generally, and exceeding 80° in the south of Italy.

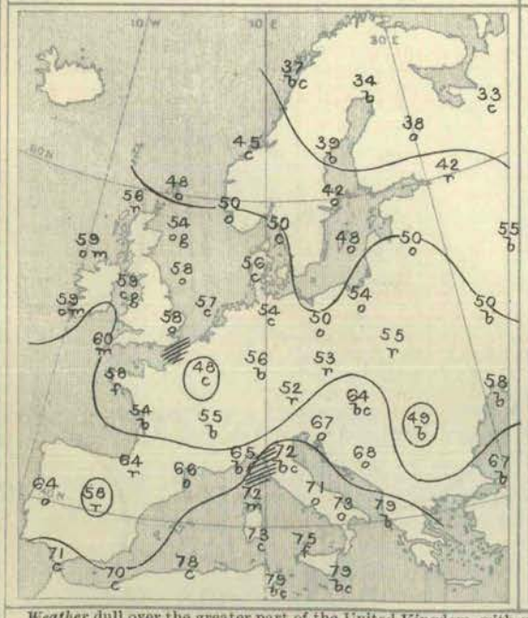
Wind light to moderate from West or South-West over Ireland and Scotland, but North-Westerly or Northerly over England. Strong from West or North-West in the west of France, light from the Southward in the central parts of that country; cyclonic circulation of light breezes reported over Germany, Northerly in Sweden, Easterly in the west of Norway, variable in Russia and Italy, light from the South-Eastward in Austria. Subsequently veering to the North-Westward on some parts of our western and northern coasts, strong winds in the west of France subsiding gradually.

Barometer highest, 30·1 ins. and upwards over Turkey and Asia Minor, 30·0 ins. and upwards over Morocco and the southern half of the Spanish Peninsula. Lowest, (1) 29·4 ins. and upwards in a shallow depression over the north of Russia; (2) 29·5 ins. and less in two other disturbances—one lying over the northern half of Germany, and the other off the north of Scotland; (3) 29·6 ins. and less in a small system near Paris. Depression off north of Scotland subsequently spreading south-eastwards over the northern parts of the North Sea; disturbances over France and Germany moving north-eastwards.

Monday, 18th September.

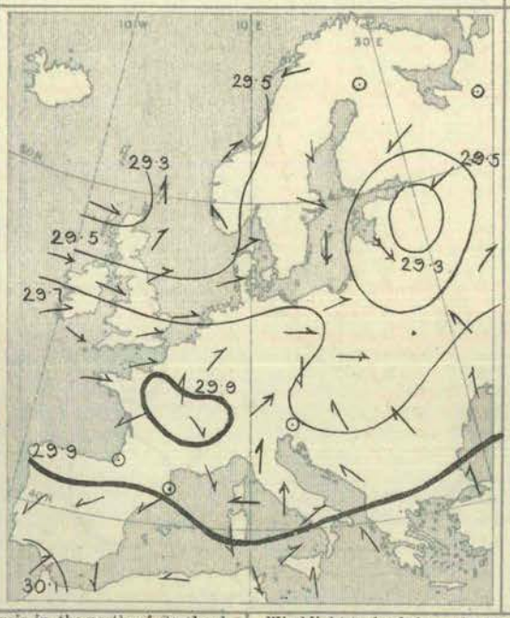
Temperature and Weather.

8 a.m.

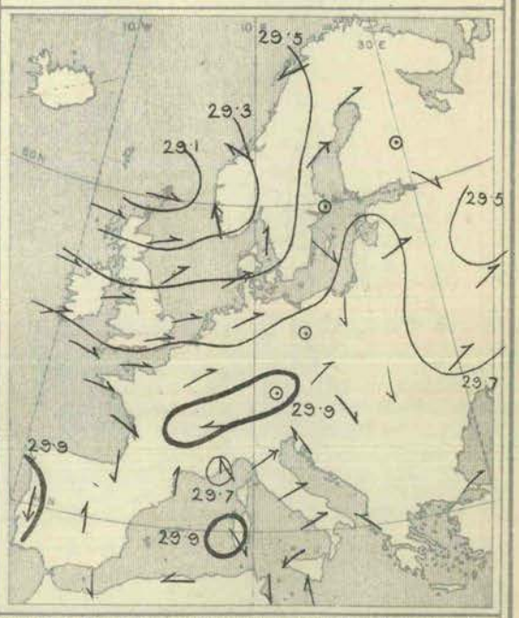


Barometer and Wind.

8 a.m.



6 p.m.



Weather dull over the greater part of the United Kingdom, with rain in the north of Scotland and at some of the Channel stations, and with passing showers on our north-west coasts. Fine in the north of Scandinavia, central France, and the central and southern parts of Russia, but dull in most other parts of the Continent, with rain over the Gulf of Finland, Poland, and south Germany. Showers falling during day in many parts of western Europe, but weather remaining dry at several of our south-eastern and south-western stations. Sky clearing over Finland and the Baltic Provinces and also in Italy.

Temperature risen in our Islands, Scandinavia, Austria, and the south of Italy, but fallen elsewhere. Morning readings highest, 79° at Brindisi, Malta, and Sfax, 78° at Algiers, and 75° at Palermo, above 70° at most of the Mediterranean stations, and above 60° in the extreme south of England. Lowest, 31° at Ulleaborg, 33° at Archangel, 34° at Haparanda, 37° at Bodö, and 39° at Hernösand. Rising during day to 65° and upwards in many parts of Great Britain, and reaching 68° at Loughborough. Exceeding 70° over southern Europe generally, and exceeding 80° in the south of Italy, the highest reading of all being 95° at Palermo.

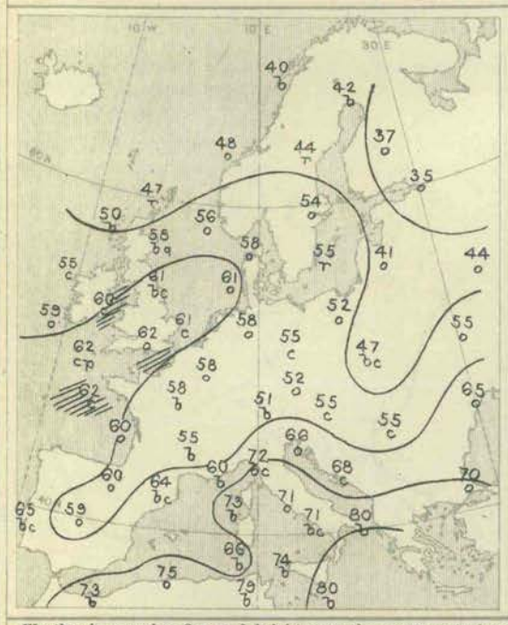
Wind light to fresh from the Westward or South-Westward over the greater part of the United Kingdom, Denmark, Germany, the Netherlands, and the north of France; Southerly in the north and east of Scotland; South-Easterly or Easterly at the Norwegian stations. Cyclonic circulation reported over Sweden and western Russia, with a strong gale from North-West at Riga. Light South-Easterly or Southerly over Italy, Austria, and the south of Russia. Subsequently veering to the Westward in the north and east of Scotland, and increasing to a moderate gale in Caithness; no important change occurring elsewhere.

Barometer highest, 30·1 ins. and upwards in the south of Spain, 29·9 ins. and upwards over the extreme southern and south-eastern parts of Europe generally, as well as over central France. Lowest 29·2 ins. and less in a depression lying over the north of Scotland, and also in another disturbance over the Baltic Provinces. Both disturbances subsequently moving slowly eastwards; former system growing deeper, latter partially filling up.

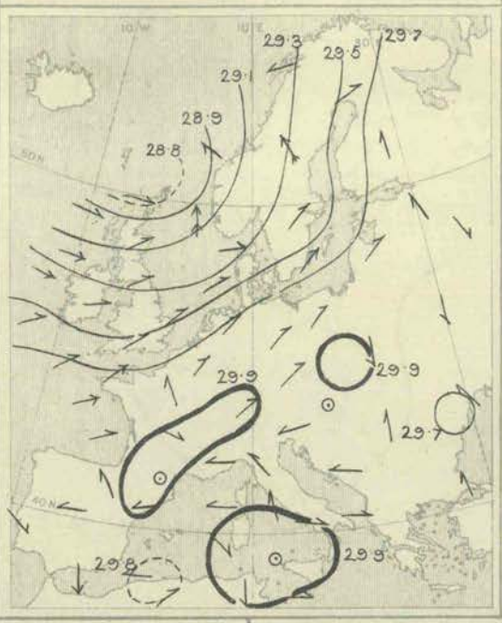
Judd & Co Ltd, Lith. 63, Carter Lane

Tuesday, 19th September.

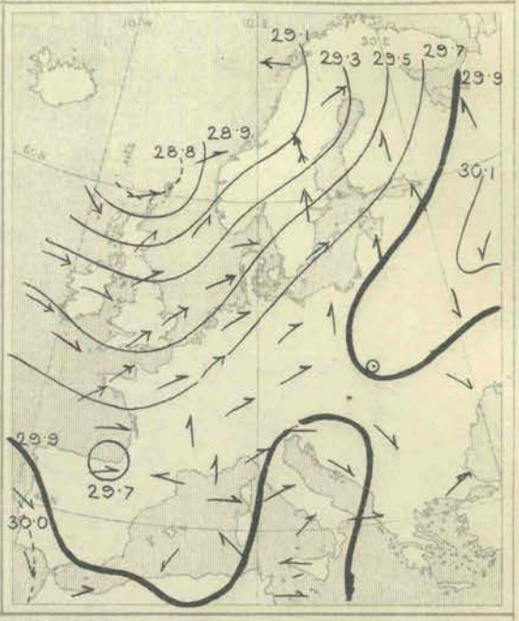
Temperature and Weather. — 8 a.m.



Barometer and Wind. — 8 a.m.



Barometer and Wind. — 6 p.m.



Weather in morning fine and bright over the more central and eastern parts of the United Kingdom, but cloudy and showery in most other districts. Fine in the north of Scandinavia and also in Italy and the central and southern parts of France; dull in the other Continental regions, with rain at some of the Swedish stations. Showers falling during day in nearly all parts of the United Kingdom, and heavy rain in Denmark, Holland, and the south of France; a thunderstorm occurring at Biarritz and lightning seen at Wick and Skudesnaes.

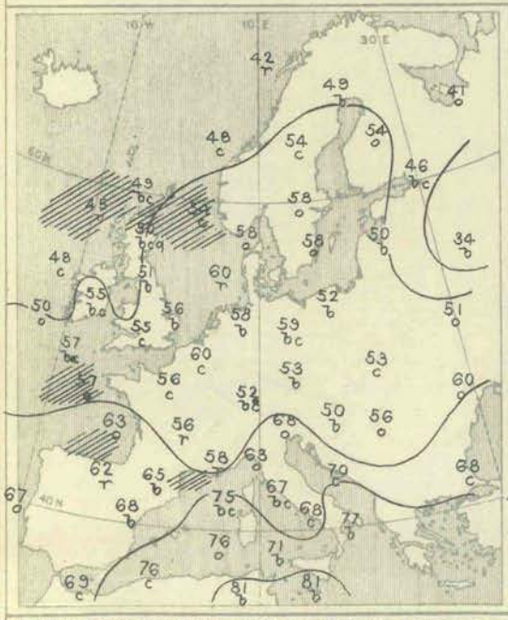
Temperature risen over England, and also in Scandinavia, Denmark, and the south of Russia, fallen elsewhere. Morning readings highest, 80° at Brindisi and Malta, 79° at La Calle, Sfax, and Aumale, and 75° at Algiers, above 65° in many parts of southern Europe, above 60° at most of the English stations, and above 55° in the east of Scotland and the south of Norway. Lowest, 34° at Uleaborg, 35° at St. Petersburg, 37° at Kuopio, 40° at Bodö, and 42° at Haparanda. Rising during day to between 65° and 69° over England, and to between 73° and 78° over Spain and the central and southern parts of France, and to 80° or more in the south of Italy.

Wind moderate to strong from the Westward or South-Westward over our Islands and the north of France, light from South or South-West over Germany, Denmark, and the Netherlands, and strong to a gale from the same quarters in the south of Scandinavia; Easterly or South-Easterly over the northern parts of Scandinavia, with a gale at Hernösand. Chiefly Westerly in Italy, variable airs over Spain and Algeria, and also in Austria and the south of Russia. Subsequently veering to the North-Westward in the north of Scotland, and increasing to a gale at night. Southerly gale springing up at the mouth of the Gulf of Finland.

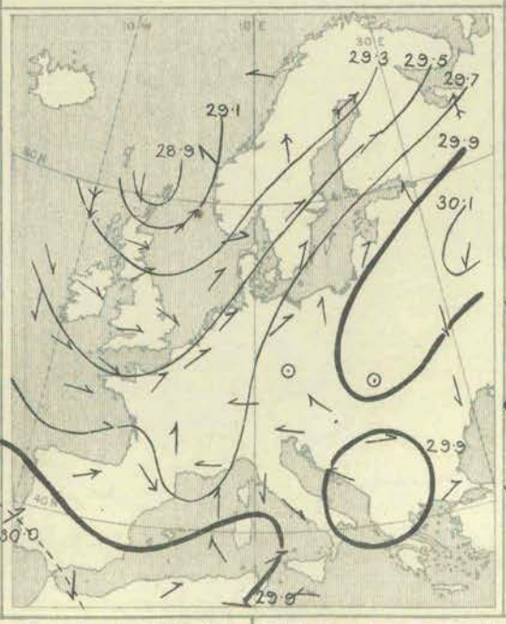
Barometer highest, 29·8 ins. to 29·9 ins. and upwards over the greater part of Russia, central and southern Europe, and the Mediterranean, but below 29·8 ins. over the south of Russia. Lowest, 28·8 ins. and less in a well-marked depression lying to the northward of the Shetlands; gradients rather steep over our Islands, Scandinavia, and the North Sea. Depression remaining almost stationary during day; shallow secondary disturbances passing eastwards over various parts of the United Kingdom and France.

Wednesday, 20th September.

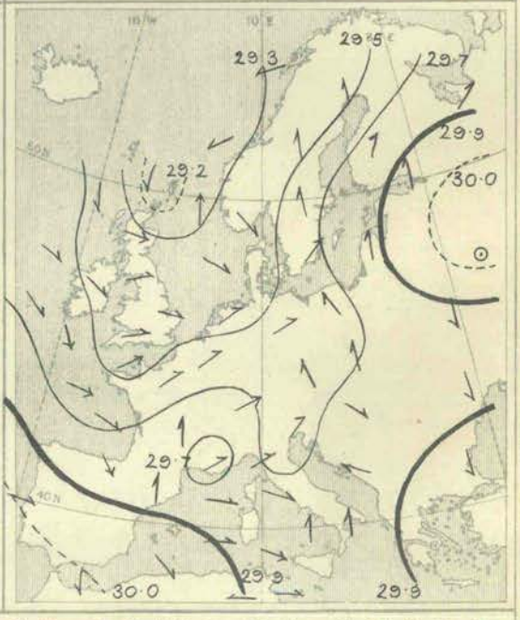
Temperature and Weather. — 8 a.m.



Barometer and Wind. — 8 a.m.



Barometer and Wind. — 6 p.m.



Weather fine in the eastern parts of our Islands, but showery in the west, and rainy in the extreme north of Scotland. Fine at many of the Russian, German, Austrian, and Italian stations, but dull in Scandinavia, Denmark, the Netherlands, France, and Spain, with rain in many places. Rain falling during day in nearly all parts of western Europe—heavily in places, and thunderstorms or lightning only reported over the south of England.

Temperature fallen in our Islands, and also in Italy and the south of Russia, risen rapidly in Finland; changed irregularly elsewhere. Morning readings highest, 81° at Malta and Sfax, 77° at Brindisi, and 76° at Cagliari and Algiers, above 65° over southern Europe generally. Lowest, (1) 34° at Moscow and 41° at Archangel; (2) 42° at Bodö; (3) 45° at Stornoway, 46° at Parsonstown, and 47° at Nairn, Leith, and Loughborough, below 50° in many parts of the United Kingdom, Remaining below 60° all day at most of our western and northern stations, but reaching 65° or 66° in some parts of the eastern and south-eastern districts; exceeding 70° over southern Europe generally, and exceeding 80° in Italy. Frost occurring at night over the central parts of Ireland and England.

Wind strong to a gale from the Northward or North-Westward in the north of Scotland, and moderate from the same quarters in Ireland and the west of Scotland. Light to moderate from the Westward or South-Westward over England, the east of Scotland, Spain, and the west of France; Southerly over Scandinavia, northern Russia, Denmark, Germany, the Netherlands, and central France, with a gale at Archangel, Uleaborg, and Skudesnaes. Light from the Northward in the south of Russia, variable in Austria, Italy, Algeria, and the south of France. Severe squall from the Northward passing over Scilly in afternoon; strong gale experienced in the north of Scotland throughout greater part of day.

Barometer highest, 30·1 ins. and upwards over central Russia, 30·0 ins. and upwards over Morocco and the southern parts of the Spanish Peninsula. Lowest, 28·9 ins. and less in a depression lying between the Shetlands and the Norwegian coasts. Depression filling up gradually during day, well-marked secondary disturbance forming suddenly over the south-west of England in afternoon, but afterwards dispersing slowly.

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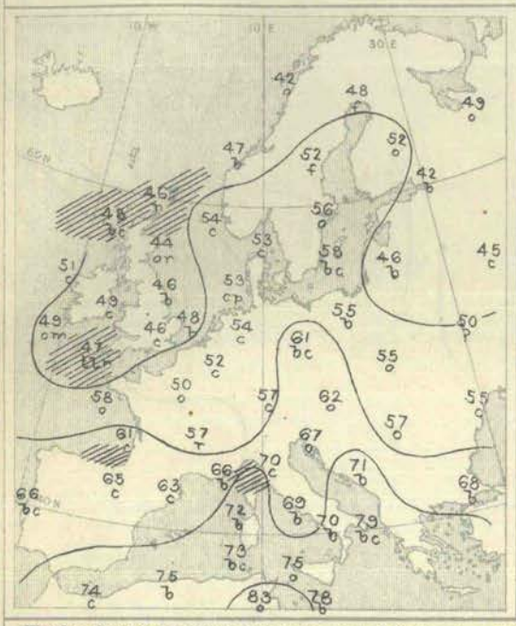
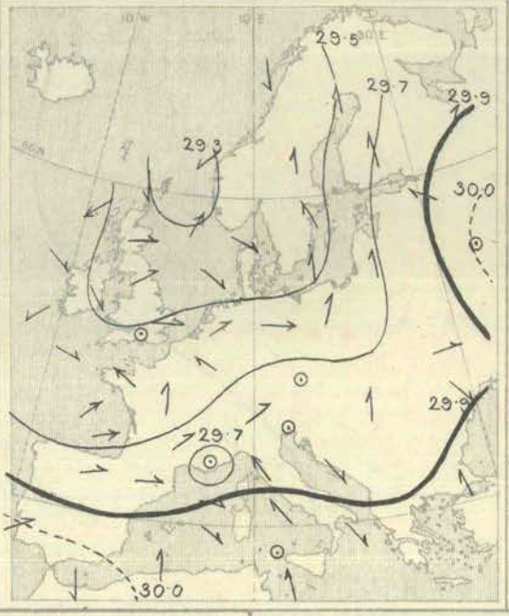
Thursday, 21st September.

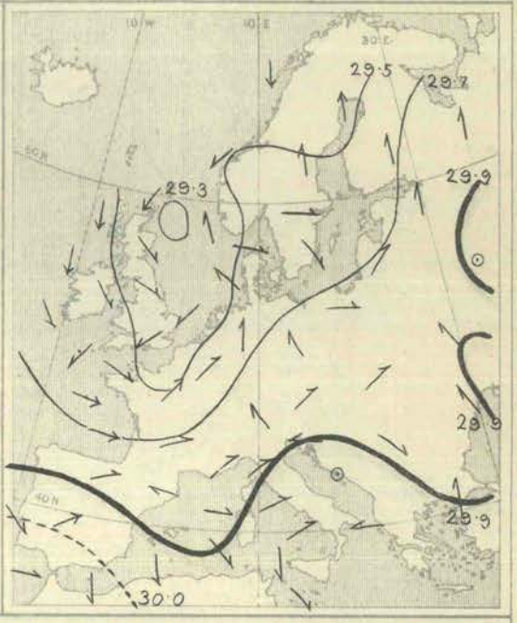
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fine over Ireland, Wales, the west of Scotland, and the north and east of England, rainy in the north-east of Scotland, showery at several of our southern stations, with a thunderstorm at Scilly. Fine over the Netherlands, western Russia, and southern Europe generally, but cloudy in other parts of the Continent, with fog in Sweden, and rain at several of the French stations. Heavy rain falling during day in many parts of our Islands and France. Thunderstorms or lightning singly reported at several of our southern stations, as well as in isolated parts of France, Germany, and Austria. Solar and lunar halos seen in some parts of England.

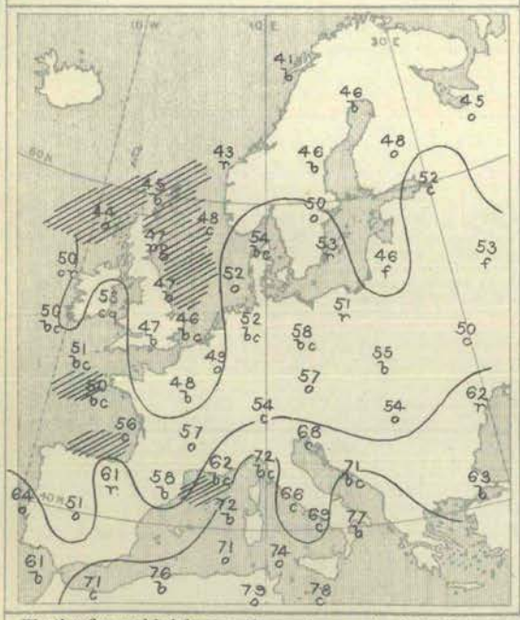
Temperature fallen in the north-western and northern countries, but risen elsewhere. Morning readings highest, 83° at Sfax, 79° at Brindisi and Tunis, and 78° at Malta; above 70° at several of the Mediterranean stations, and above 65° over southern Europe generally. Lowest, (1) 37° at Parsonstown, 40° at Loughborough, and 42° at Oxford; (2) 42° at Bodö and St. Petersburg, and 45° at Helsingfors and Moscow. Daily maxima below 55° in many parts of the United Kingdom. Exceeding 70° in most parts of southern Europe, and exceeding 80° in Italy.

Wind strong from the Northward in the north of Scotland, moderate from the same quarter or from North-West on our western coasts; Westerly or South-Westerly in the eastern parts of Great Britain, and also over Denmark and Germany; Southerly over Sweden and the western and northern parts of Russia. Easterly at several of the English Channel stations. South-Westerly or Westerly in France and Spain; variable in Italy and Algeria. Subsequently increasing to a strong gale from the North-Westward in the north and north-east of Scotland; shifting to the North-Westward over the Channel and north of France.

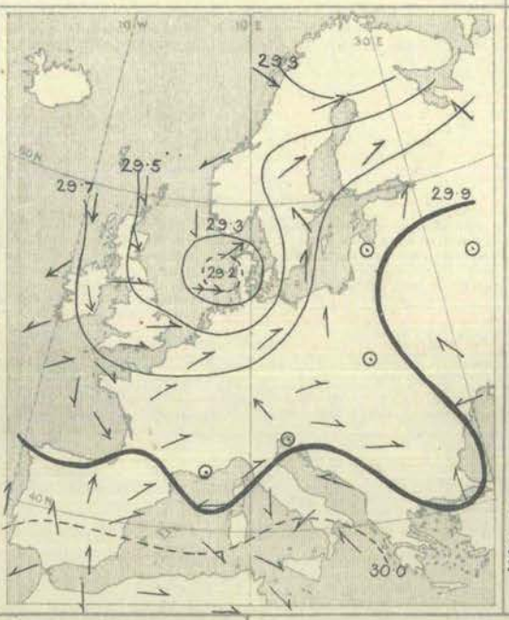
Barometer highest, 30·0 ins. and upwards over Morocco and the south of Spain and also over central Russia. Lowest, 29·3 ins. and less in a depression lying between the Shetlands and the Norwegian coasts; 29·5 ins. and less in a well-marked secondary disturbance over the western part of the English Channel. Former depression subsequently travelling slowly southwards; latter system moving in an east-north-easterly direction to the Straits of Dover.

Friday, 22nd September.

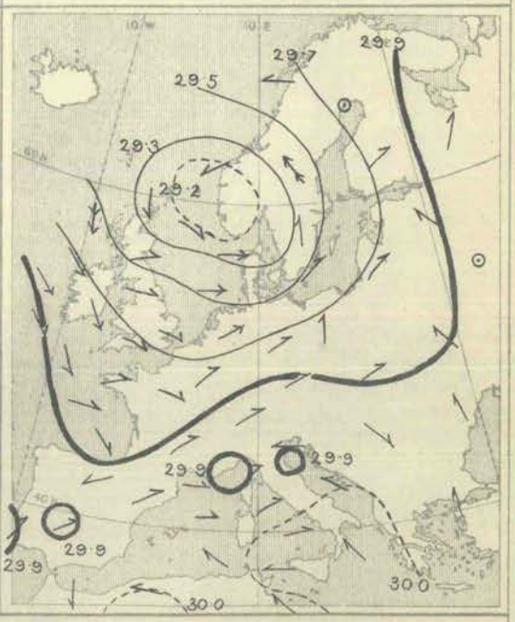
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fine and bright over the southern parts of the United Kingdom, as well as at many of the French, German, and Italian stations. Cloudy in all other parts of Europe, with showers in the north of our Islands, and with rain in many parts of Scandinavia, as well as in the south-west of France. Heavy rain, mingled with snow and sleet, occurring during day in the north of Scotland, and showers in most other parts of the United Kingdom. Lightning seen in the south of England at night. Large quantities of rain falling at many of the Russian stations; thunderstorm occurring at Constantinople.

Temperature risen slightly in our Islands and more decidedly over Russia, fallen elsewhere. Morning readings highest, 79° at Sfax, 78° at Malta, 77° at Brindisi, and 76° at Algiers, above 70° at most of the Mediterranean stations. Lowest, (1) 40° at Parsonstown, 44° at Stornoway, and 45° at Sumburgh Head and Dungeness; (2) 41° at Bodö, 43° at Christiansund, and 45° at Archangel. Rising during day to 60° or a little more in the central and southern parts of England. Exceeding 70° over Spain and the south of France, and exceeding 80° in Italy. Frost occurring at night over the north of Scotland and central Ireland.

Wind Northerly or North-Westerly in the west and north of our Islands; fresh or strong in many places, with a gale in the north of Scotland, moderate to fresh from the Westward in the east and south-east of England, as well as over Denmark, north Germany, and the Netherlands. Gale from West reported at Fanö and from South-West at Münster. Southerly over Finland, Sweden, and the Baltic; Easterly over the southern parts of Norway, but Westerly in the north of Scandinavia. Southerly over Spain and the south of France; variable in Italy, Algeria, and the south of Russia. No important change occurring over western Europe during day, but gale from South-East springing up at Hernösand and from West over the Christiania Fiord.

Barometer highest, 30·0 ins. and upwards over the southern parts of Spain and Italy and the central and southern parts of the Mediterranean. Lowest, 29·2 ins. and less in a well-marked depression lying over Denmark, 29·4 ins. and less over the extreme north of Scandinavia. Danish depression subsequently moving northwards to the south of Norway, and barometer again falling on our northern coasts.

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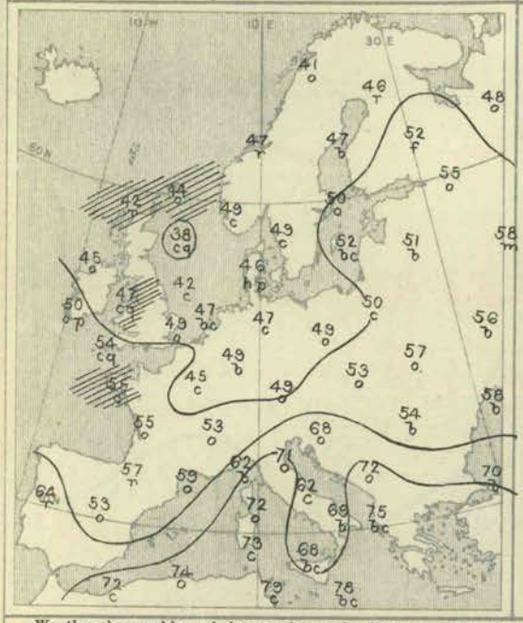
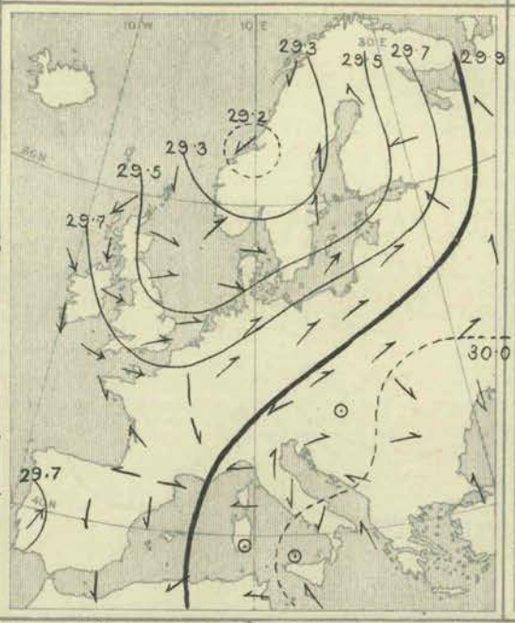
Saturday, 23rd September.

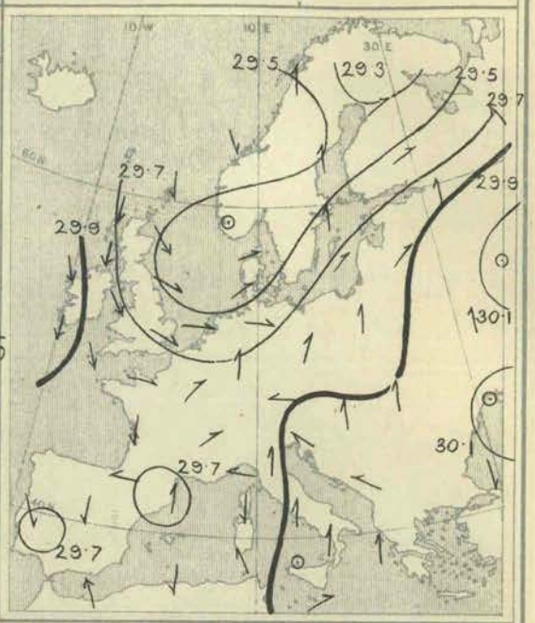
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather changeable and showery in nearly all parts of western Europe. Rainy in Lapland and Finland; dull at most of the Russian, German, and Austrian stations; fine and bright over the southern parts of Russia and Italy. Snow falling later over the north of England, and heavy rain over Denmark, the northern parts of Sweden and Russia and the south of France.

Temperature fallen generally, but risen a little in the south of England and the north of France, as well as at most of the Russian stations. Morning readings highest, 79° at Sfax, 78° at Malta, 76° at Tunis, and 75° at Brindisi; above 60° in most parts of southern Europe, but below 55° over central Spain. Lowest, 38° at Aberdeen, 40° at Leith, and 41° at Bodö, Nairn, York, and Donaghadee, below 45° over the northern parts of the United Kingdom generally, and below 50° at all but our extreme southern stations. Thermometer remaining below 50° all day in most parts of our northern and eastern districts, but rising to between 55° and 60° on our southern coasts, to 70° or more over the greater part of southern Europe. Frost occurring over central Ireland at night, and also (on the grass) in London.

Wind fresh to strong from the Northward or North-Westward on our western and extreme northern coasts; Westerly or South-Westerly in the eastern, central, and southern parts of our Islands, as well as in Denmark and the south of Norway, with a gale in the Christiania Fiord. Southerly or South-Westerly over Germany, Sweden, and the Baltic; South-Easterly over northern Russia. Light and variable over southern and eastern Europe. Subsequently increasing to a gale from the North-Westward in the north of Scotland. Light Southerly breezes setting in over Italy.

Barometer highest, 30·0 ins. and upwards in a large anticyclone covering the south-eastern parts of Europe. Lowest, 29·2 ins. and less in a depression over the west of Norway; 29·4 ins. and less in a "V" shaped secondary disturbance extending south-westwards across the North Sea to the east of Scotland; 29·7 ins. and less in a shallow depression off the Portuguese coasts. Secondary disturbance subsequently moving south-eastwards across the North Sea; barometer rising in all parts of the United Kingdom.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force is indicated thus: ⟶⟶ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze: and ⊙ = a calm. In the left-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Germany, Sweden, and Norway, and 7 a.m. in France, Algeria Italy, Austria, and Russia; that for 6 p.m. is prepared from observations made at 6 p.m. in the British Islands and France, 7 p.m. in Algeria, 8 p.m. in Sweden and Norway, Germany, and Austria, and 9 p.m. in Russia, Belgium, and Italy. The time indicated in each case is the standard time for each country.

GENERAL NOTES.

During the greater part of last week the barometer was highest over southern Europe and the Mediterranean, but after the middle of the period a second area of high readings was formed over central Russia. The lowest pressures have been found in a well-marked cyclonic disturbance which advanced slowly eastwards past the north of Scotland between the 18th and 20th, and which afterwards moved south-eastwards to Denmark. The progress of the system was attended by very strong Westerly winds and heavy rain in the north of Scotland, followed by North-Westerly and Northerly gales and snowstorms. In other parts of north-western and northern Europe the conditions were influenced by numerous secondary systems which appeared to the southward of the main disturbance, and which occasioned gusty, showery weather in most places, with thunderstorms in France, Germany, and the extreme south of England. Towards the close of the week the cyclonic system over Denmark began to move northwards across Norway, but a well-defined subsidiary disturbance was travelling south-eastwards across the North Sea, and cold, showery weather was reported over the whole of the United Kingdom.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 224.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	13·4	?	16	?	EASTBOURNE	19·1	?	22	?
OSWALDKIRK (Yorkshire)	31·2	?	37	?	TENBY	31·6*	?	37*	?
WORKSOP	33·0	+ 8·8	39	+11	NEWQUAY	24·0	?	28	?
THURCASTON (Leicestershire)	28·8	+ 3·3	34	+ 6	TORQUAY	23·2*	?	27*	?
MARGATE	20·1	?	24	?	ARLEY COTTAGE (County Cavan)	32·1	?	38	?
WESTBOURNE (Sussex)	23·9*	?	28*	?	GUERNSEY	23·1*	?	27*	?
BRIGHTON	25·1	?	30	?					

* The values at Westbourne, Tenby, Torquay and Guernsey are obtained by Jordan's Photographic Recorder.

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WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; R. H. SCOTT, F.R.S., SECRETARY.

By whom Subscriptions, payable in advance, can be received.

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VOL. X. No. 39.] *Third Series.* WEEK ENDING SATURDAY, 30TH SEPTEMBER, 1893. [*Price 6d.* *Annual Subscription, post paid, £1 10s. 0d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871-90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the twenty-five years 1866-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the ten years 1881-90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

	DISTRICTS. (See p. 230.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 1st, 1893. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	59	25	53·0	39·9	46·2	3 below.	38	−15	6	+ 3	2165	+543	491	− 54
	1. SCOTLAND, EAST	68	30	54·0	40·7	47·1	3 below.	41	−16	4	+ 1	2407	+333	552	− 20
	2. ENGLAND, N.E.	62	34	56·7	44·2	50·2	1 below.	57	−11	0	− 2	2628	+414	436	− 62
	3. ENGLAND, EAST	67	37	61·5	45·6	53·1	0 (average)	78	− 2	0	− 1	3054	+484	524	− 38
	4. MIDLAND COUNTIES	68	35	60·6	45·5	52·7	1 above.	75	− 2	0	− 3	3159	+636	505	− 50
	5. ENGLAND, SOUTH	67	?33	62·6	47·3	54·8	0 (average)	90	+ 1	0	− 1	3327	+557	373	− 43
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	62	35	55·9	45·8	50·6	0 (average)	60	− 7	0	− 2	2614	+489	354	− 63
	7. ENGLAND, N.W.	64	40	57·8	48·8	53·1	0 (average)	78	− 8	0	− 1	3008	+696	323	− 91
	8. ENGLAND, S.W.	67	30	60·5	48·4	54·1	0 (average)	85	+ 3	0	0	3256	+694	246	− 70
	9. IRELAND, NORTH	64	33	58·0	47·2	52·3	1 above.	72	0	0	− 1	2834	+567	258	−104
	10. IRELAND, SOUTH	65	31	60·0	48·4	53·9	1 above.	83	+ 1	0	− 1	3168	+617	178	−100
	—CHANNEL ISLANDS	65	46	61·9	53·7	57·6	1 above.	109	+ 6	0	0	3676	+818	70	− 52

Rainfall. Bright Sunshine.

	DISTRICTS. (See p 230.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the mean for the Week.	From Jan. 1st, 1893. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 1st, 1893. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of ins.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	6	14	3 more.	176	0	34·2	+ 0·2	25	+13	31	+ 16	919	− 94	25	− 3
	1. SCOTLAND, EAST	6	5	2 less.	142	− 3	19·1	− 3·9	21	− 3	26	− 3	1195	+ 17	33	+ 1
	2. ENGLAND, N.E.	6	8	2 more.	121	−13	14·9	− 4·1	24	− 1	30	− 1	1336	+258	37	+ 7
	3. ENGLAND, EAST	5	5	1 less.	116	−15	13·3	− 5·5	25	− 7	30	− 5	1579	+269	44	+ 7
	4. MIDLAND COUNTIES	5	6	1 less.	114	−15	14·0	− 6·9	29	+ 3	35	+ 5	1501	+531	42	+ 9
	5. ENGLAND, SOUTH	5	12	5 more.	111	−14	14·8	− 4·8	31	+ 2	38	+ 4	1635	+362	46	+ 10
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	6	15	4 more.	140	−13	26·4	− 8·9	17	− 8	20	− 9	1350	+183	37	+ 5
	7. ENGLAND, N.W.	7	18	9 more.	130	−10	21·0	− 3·7	20	− 2	24	− 3	1336	+177	37	+ 5
	8. ENGLAND, S.W.	6	12	2 more.	117	−26	21·7	− 6·6	31	0	38	0	1721	+342	48	+ 9
	9. IRELAND, NORTH	7	11	3 more.	152*	−14	24·0	− 2·1	26	+ 4	31	+ 6	1168	+108	32	+ 3
	10. IRELAND, SOUTH	6	10	2 more.	132	−19	22·1	− 6·1	23	− 2	28	− 4	1209	+ 75	36	+ 2
	—CHANNEL ISLANDS	7	13	4 more.	124	−29	19·3	− 3·3	34	− 1	41	− 1	2018	+399	57	+ 12

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather continued very changeable and unsettled, with heavy falls of rain at almost all the western and extreme northern stations, and frequent sharp showers in the south and east. Thunderstorms were experienced at some of our south-eastern stations at the close of the period.

Temperature was rather below the mean in the north and east of Scotland, but elsewhere it was about its normal value. The highest of the maxima, which occurred on the 27th over England, and on the 28th over Ireland and Scotland, ranged from 68° in Scotland E. and the Midland Counties to 59° in Scotland N. The lowest of the minima were experienced during the early days of the period, when the thermometer fell to 25° in Scotland N. (at Lairg) to 30° in Scotland E. and England S.W., to 31° in Ireland S., and to between 33° and 37° in most other districts; in England N.W., however, the lowest reading was 40°, and in the Channel Islands 46°.

Rainfall was a little less than the mean in Scotland E., England E., and the Midland Counties, but in all other districts there was an excess, that in England N.W. being very large, at Stonyhurst the aggregate fall for the week was as much as 4·04 ins.

Bright Sunshine was less than the normal amount in most districts, the percentage of the possible duration ranging from 41 in the Channel Islands, 39 in England S.W., and 38 in England S., to 24 in England N.W., and 20 in Scotland W.

Barometer and Wind.—At the commencement of the week an anticyclone lay over our south-western coasts, and the winds over our Islands were moderate from the North-Westward. The system soon moved south-eastwards, the winds shifted to West and South-West, and depressions began to appear over us from the Atlantic. The disturbance whose centre was shown near the Hebrides on the morning of the 29th was large and deep, and caused strong, squally winds over our Islands generally, and slight gales at some of our southern stations. At the end of the week it was filling up and moving slowly northwards.

* This value has been altered owing to the receipt of further information for a preceding week.

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II.—DATA from which the SUMMARY on page 229 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°				Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	55	35	50·1	40·4	45·0	− 3·7	28	4	5	0·50	−0·35	*	*	*	*
	Stornoway	59	35	54·0	38·7	46·0	− 3·0	42	9	6	0·88	−0·14	35·6	+12·2	44	+16
	Wick	58	34	52·9	40·6	46·5	− 3·0	37	4	5	0·32	−0·28	*	*	*	*
	Lairg (S)	57	25	52·2	35·7	43·7	− 5·2	38	18	7	0·39	−0·06	*	*	*	*
	Glencarron (S)	57	34	53·2	39·0	45·8	− 2·7	39	8	6	2·88	+1·26	*	*	*	*
	Fort Augustus (S)	58	36	54·7	41·3	47·7	− 2·1	43	2	6	1·31	+0·36	20·3	?	25	?
	Fort William (S)	57	37	53·9	43·6	48·5	− 1·1	46	0	6	2·90	+1·15	19·1	?	23	?
1. SCOTLAND, E.	Nairn	60	30	55·1	38·4	46·4	− 4·0	46	10	5	0·26	−0·34	*	*	*	*
	Aberdeen	57	33	52·7	40·3	46·2	− 4·4	37	5	6	0·57	−0·13	22·0	− 2·0	27	− 3
	Braemar (S)	56	31	49·4	38·4	43·6	− 3·4	26	10	6	0·31	−0·54	18·3†	?†	22†	?†
	Ochtertyre (S)	62	39	55·9	42·1	48·7	− 1·4	47	0	5	0·59	−0·28	*	*	*	*
	Leith	68	39	57·1	44·3	50·4	− 1·8	59	0	7	0·95	+0·47	*	*	*	*
	Marchmont (S)	58	35	53·9	40·9	47·1	− 2·3	40	3	6	0·48	−0·26	20·8	?	25	?
2. ENGLAND, N.E.	Alnwick Castle	60	41	54·3	44·3	49·1	− 1·2	50	0	7	0·68	+0·05	*	*	*	*
	Durham	59	37	56·2	43·4	49·5	− 1·1	53	0	7	1·11	+0·51	21·8	+ 0·6	27	0
	Shields	61	34	56·9	43·9	50·1	− 1·6	57	0	6	0·86	+0·23	*	*	*	*
	Scarborough (M)												*	*	*	*
	York	62	40	59·3	45·1	51·9	− 0·5	69	0	3	0·87	+0·27	25·3	+ 4·3	31	+ 5
	Spurn Head	?	41	?	47·3	?	?	?	0	5	0·41	−0·10	*	*	*	*
3. ENGLAND, E.	Hillington (M)	64	38	60·7	45·4	52·7	+ 0·1	75	0	5	0·55	−0·06	20·8	− 4·2	25	− 5
	Yarmouth	64	38	59·6	45·9	52·4	− 1·4	73	0	7	0·72	+0·03	*	*	*	*
	Geldeston	66	38	62·7	45·6	53·7	+ 0·1	82	0	4	0·45	−0·15	25·3	− 5·4	31	− 6
	Cambridge	67	37	63·3	45·1	53·8	+ 0·3	83	0	3	0·29	−0·22	23·8	− 4·7	29	− 5
	Rothamsted	66	39	61·2	45·8	53·1	+ 0·6	78	0	5	0·45	−0·23	29·0	?	35	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	62	40	59·7	44·6	51·8	− 0·4	69	0	6	0·42	−0·22	*	*	*	*
	Loughborough	66	39	62·7	46·6	54·3	+ 1·4	86	0	4	0·56	−0·09	*	*	*	*
	Stamford (Ketton Hall)	65	39	62·3	46·1	53·8	+ 0·9	83	0	6	0·53	−0·15	*	*	*	*
	Cheadle (M)	60	38	57·4	44·5	50·6	− 0·3	60	0	6	1·27	+0·52	*	*	*	*
	Churchstoke (M)	62	38	59·3	44·9	51·8	+ 0·9	69	0	7	0·60	−0·09	29·6	+ 4·3	36	+ 5
	Hereford (M)	63	38	61·2	45·5	53·0	+ 0·4	77	0	5	0·58	−0·09	*	*	*	*
	Cirencester	68	35	61·4	44·7	52·7	+ 0·8	75	0	5	0·39	−0·38	28·6	+ 4·1	35	+ 5
	Oxford	66	37	61·1	46·9	53·7	+ 0·3	82	0	4	0·38	−0·27	30·9	+ 4·3	38	+ 4
5. ENGLAND, S.	London	66	35	62·6	45·9	53·9	− 0·6	83	0	4	0·45	−0·15	27·1†	+ 4·8†	33†	+ 6†
	North Foreland	65	39	61·9	49·1	55·2	− 0·3	92	0	4	1·89	?	*	*	*	*
	Strathfield Turgiss (M)	64	?33	61·9	45·6	53·4	+ 0·3	80	0	6	0·60	−0·03	*	*	*	*
	Dungeness	67	36	62·9	48·3	55·3	+ 0·1	93	0	5	1·72	+1·02	*	*	*	*
	Hastings (St. Leonards)	65	37	62·3	47·5	54·5	− 1·3	88	0	6	2·07	+1·35	?34·8	?+ 1·4	?42	?+ 2
	Southampton	67	37	64·7	47·7	55·8	+ 1·1	97	0	5	1·07	+0·29	33·6	+ 2·9	41	+ 5
	Hurst Castle	67	40	63·7	50·9	57·0	+ 1·7	105	0	6	0·62	−0·10	*	*	*	*
	Stowell (M)	64	38	60·6	46·0	53·0	+ 0·5	77	0	6	0·87	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	59	40	56·2	45·3	50·5	− 0·3	59	0	6	2·58	+0·86	*	*	*	*
	Glasgow	58	41	53·3	44·7	48·8	− 1·7	48	0	7	1·61	+0·72	11·0	− 8·2	13	−11
	Ardrossan	59	42	55·6	46·1	50·6	− 1·5	60	0	6	1·03	+0·13	*	*	*	*
	Glenlee (S)	62	35	56·7	44·0	50·1	0·0	57	0	6	1·26	−0·04	*	*	*	*
	Douglas (Isle of Man)	59	44	57·5	49·0	53·1	+ 1·3	78	0	6	1·13	+0·21	22·2	+ 5·8	27	− 7
7. ENGLAND, N.W.	Stonyhurst	57	40	55·5	46·2	50·6	− 1·0	60	0	7	4·04	+2·84	25·5	+ 1·3	31	+ 2
	Blackpool (M)	60	44	57·4	50·9	54·0	+ 1·9	84	0	7	2·46	+1·56	17·9	− 6·1	22	− 8
	Manchester	64	40	58·5	45·3	51·6	− 0·3	67	0	7	1·59	+0·69	*	*	*	*
	Liverpool Obsy. (Bidston)	61	42	57·6	48·9	53·0	− 0·8	77	0	6	1·02	+0·14	15·5†	?	19†	?
	Llandudno (M)	62	46	58·7	51·2	54·8	+ 0·7	90	0	7	0·83	+0·04	?	?	?	?
	Holyhead	61	45	59·3	50·4	54·6	0·0	88	0	6	1·04	+0·21	*	*	*	*
8. ENGLAND, S.W.	Llandovery	64	36	60·6	45·1	52·5	− 0·3	74	0	7	2·04	+0·88	*	*	*	*
	Pembroke	60	43	58·6	52·4	55·4	+ 1·0	94	0	6	0·86	−0·06	28·9	+ 0·4	35	0
	Bristol (Montpelier)	66	42	62·3	49·4	55·5	+ 2·4	95	0	5	0·53	?				
	Arlington (N. Devon)	62	43	58·7	47·1	52·6	− 0·4	74	0	7	2·47	+1·31	*	*	*	*
	Cullompton (M)	67	30	62·5	45·6	53·6	+ 0·6	81	0	5	0·78	−0·12	31·1	+ 4·7	38	+ 5
	Falmouth	63	44	60·1	49·3	54·4	− 0·6	87	0	5	1·36	+0·11	33·5	+ 4·5	41	+ 5
	Plymouth	65	36	60·7	48·3	54·2	− 0·6	85	0	4	1·13	+0·25	26·9	− 2·5	33	− 4
	Prawle Point	62	41	60·4	49·9	54·9	+ 0·1	90	0	6	0·71	+0·01	*	*	*	*
9. IRELAND, N.	Malin Head	59	43	55·6	48·7	52·0	+ 1·0	70	0	7	1·47	?	*	*	*	*
	Londonderry	62	40	57·5	47·3	52·2	+ 0·5	71	0	7	1·69	+0·79	*	*	*	*
	Edenfel (Omagh)	62	37	58·0	46·0	51·7	+ 1·3	68	0	7	0·87	+0·03	*	*	*	*
	Belmullet	59	43	57·6	49·3	53·3	− 1·0	79	0	7	1·02	?	*	*	*	*
	Markree Castle	62	37	58·8	46·0	52·1	+ 1·2	71	0	7	1·18	+0·40	23·7	+ 3·6	29	+ 3
	Brookeborough	62	33	58·6	45·9	52·0	+ 2·2	70	0	7	1·06	+0·16	*	*	*	*
	Armagh	64	37	58·9	46·6	52·5	+ 1·6	74	0	7	0·74	+0·12	28·0	+ 6·2	34	+ 7
	Donaghadee	63	40	59·0	47·4	52·9	+ 0·9	76	0	7	0·64	−0·06	*	*	*	*
	Edgeworthstown	?	35	?	44·9	?	?	?	0	5	0·86	+0·14	*	*	*	*
10. IRELAND, S.	Dublin	64	39	60·1	48·8	54·2	+ 1·2	85	0	6	0·28	−0·27	32·3	+ 5·3	39	+ 6
	Parsonstown	62	31	58·9	44·4	51·5	+ 0·1	67	0	6	0·72	+0·02	17·3	− 7·2	21	− 9
	Kilkenny	62	36	60·0	46·4	52·9	+ 0·3	76	0	6	0·61	−0·01	*	*	*	*
	Waterford	65	38	61·3	47·4	54·0	+ 0·1	84	0	5	0·63	−0·16	*	*	*	*
	Roche's Point	63	41	60·9	50·0	55·2	+ 1·1	92	0	5	0·32	−0·57	*	*	*	*
	Valencia	62	45	59·1	51·0	54·9	+ 0·2	90	0	7	1·65	+0·57	19·9	− 5·0	24	− 8
	Killarney	64	39	60·2	49·0	54·3	+ 1·2	86	0	7	1·39	?	*	*	*	*
	Foynes	62	46	59·1	50·3	54·5	+ 2·1	88	0	7	2·01	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	64	50	61·0	54·0	57·3	+ 0·9	107	0	7	1·00	+0·15	*	*	*	*
	Jersey	65	46	62·7	53·3	57·8	+ 0·2	111	0	6	1·52	+0·72	34·6	0·0	42	0

Stations marked (M) are in connection with the Royal Meteorological Society, and those marked (S) with the Scottish Meteorological Society.

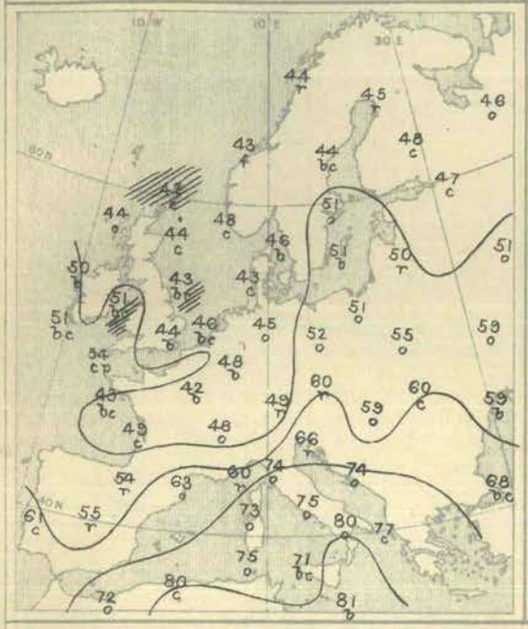
* An asterisk is inserted in all places for which the information is not usually received.

† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row) at the Kew Observatory, and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

Sunday, 24th September.

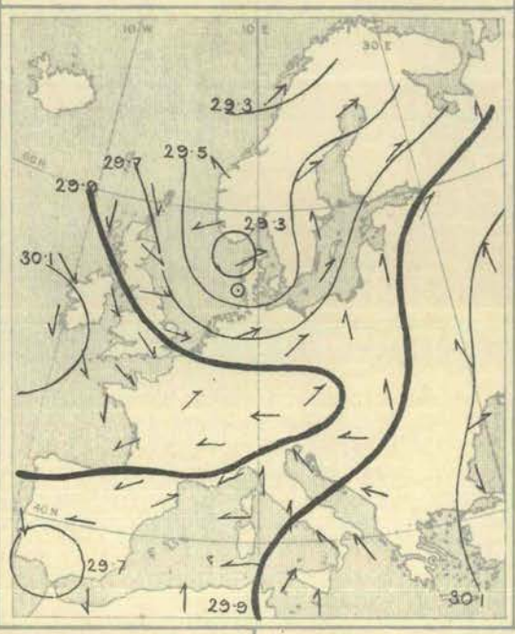
Temperature and Weather.

8 a.m.

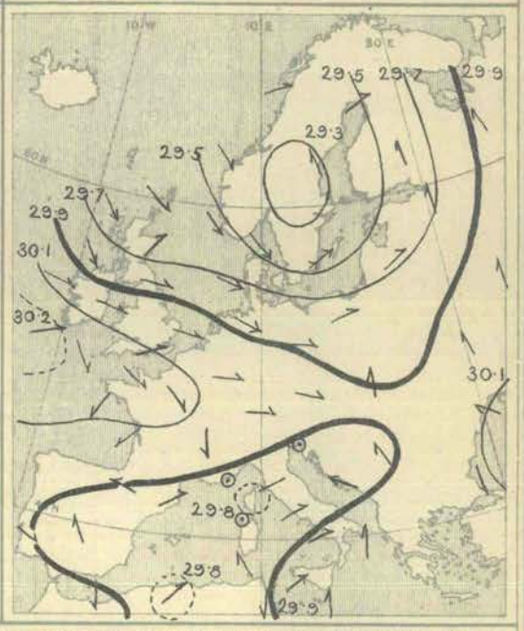


Barometer and Wind.

8 a.m.



6 p.m.



Weather fine and bright over the greater part of the United Kingdom, the Netherlands, and the north of France, as well as in Sweden and the south of Russia. Cloudy or overcast elsewhere, with rain over the south of France and central Spain, and also over the Baltic Provinces and the northern parts of Norway and Finland. Rain setting in later over the northern parts of our Islands, and considerable amounts falling at some of the Scandinavian stations. Lunar halo seen at the North Foreland, and lightning at Algiers.

Temperature fallen in Denmark, Russia, France, and the south-east of England, but risen in most other countries. Morning readings highest, 81° at Malta, 80° at Naples and Algiers, and 77° at Brindisi; above 70° at all the Italian stations, and above 60° in the south of France. Lowest, 42° at Sumburgh Head, Parsonstown, and Paris, and 43° at Christiansund, Fanö, Wick, Nairn, and Shields, below 45° in many parts of Great Britain. Rising during day to 55° or more at most of the English and Irish stations, and reaching 62° at Prawle Point; exceeding 65° in the west of France, exceeding 70° in Spain and the south of France, and exceeding 80° in Italy, the highest reading of all being 104° at Palermo.

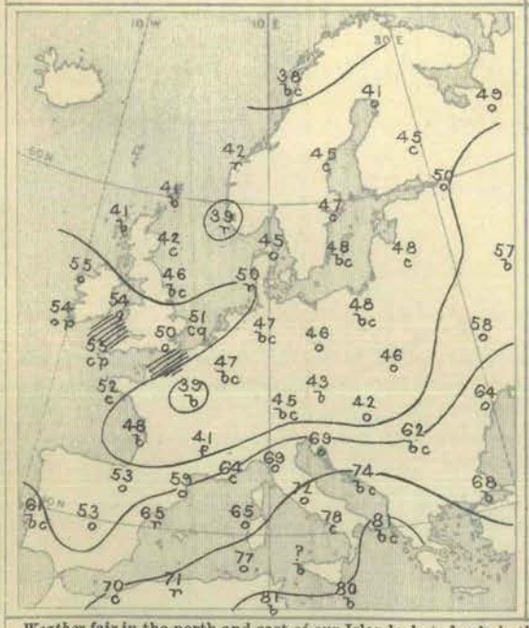
Wind moderate to strong from the North-Westward over the greater part of the United Kingdom; strong from the Westward or South-Westward over the Netherlands and north Germany; Southerly or South-Westerly over Denmark, Sweden, and Russia. Variable in Austria, South-Easterly in Italy, Easterly or North-Easterly in Spain and the west and south of France. Subsequently increasing in force from the North-Westward in the extreme north and north-west of our Islands. Gale from the South-Westward springing up over the northern part of the Baltic.

Barometer highest, 30·1 ins. and upwards in an anticyclone spreading over the south of Ireland from the Atlantic, and also in another system lying over the central and southern parts of Russia. Lowest, 29·3 ins. and less in a depression off the north-west of Norway, 29·4 ins. and less in a well-marked secondary disturbance over Denmark and the south of Norway. Depressions subsequently moving eastwards, but fresh disturbances advancing over the north of Scotland from the north-westward.

Monday, 25th September.

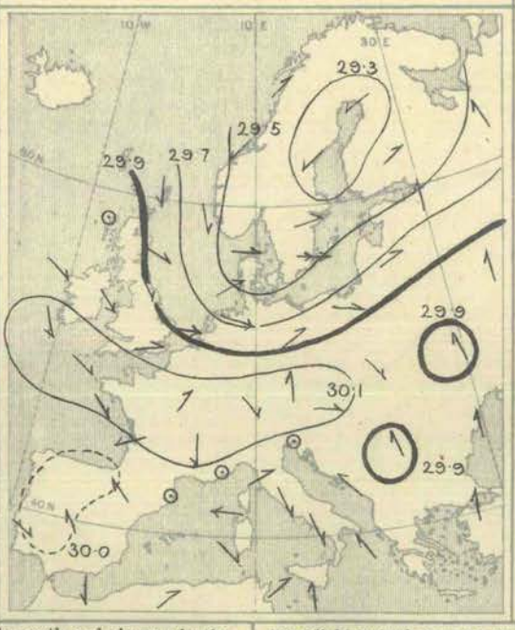
Temperature and Weather.

8 a.m.

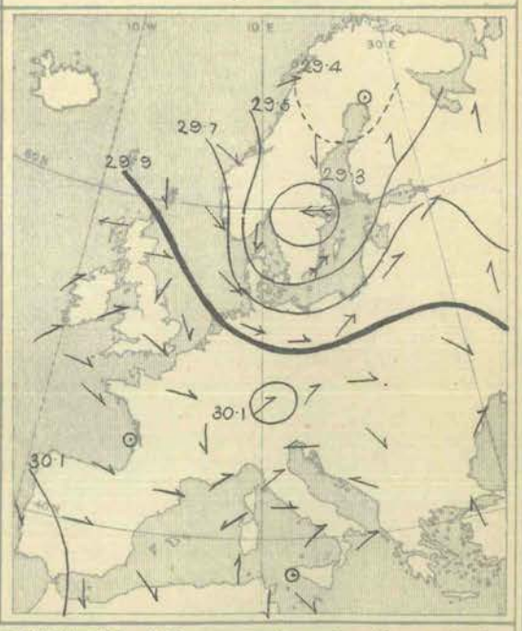


Barometer and Wind.

8 a.m.



6 p.m.



Weather fair in the north and east of our Islands, but cloudy in the south, and showery in the west. Fine and bright over the greater part of France, Germany, and Austria, as well as in the south of Italy, cloudy in most other countries, with rain in the west of Norway, as well as at Helsingfors, Fanö, Florence, and Barcelona. Showers falling during day in most parts of the United Kingdom, and heavy rain setting in at night in the north of Ireland. Rain falling also in Scandinavia, Denmark, Russia, and north Germany; thunderstorm occurring at Lyons.

Temperature risen over England and Ireland, as well as north Germany and several parts of Russia, fallen elsewhere. Morning readings highest, 81° at Brindisi and Sfax, 80° at Malta, 78° at Naples, and 77° at Cagliari, above 65° in most parts of southern and eastern Europe. Lowest, (1) 38° at Bodö, 39° at Skudesnaes, and 41° at Uleaborg, Sumburgh Head, Stornoway, and Nairn; (2) 39° at Paris, and 41° at Wiesbaden and Lyons. Remaining below 50° all day in the north of Scotland, but reaching 60° or a little more in the central and southern parts of our Islands, exceeding 65° at several of the French stations, and exceeding 90° in the south of Italy.

Wind light to fresh from the North-Westward in all the more western and northern parts of our Islands, but Westerly in the south and south-east of England. Strong from South-West over Holland, Denmark, north Germany, the Baltic, and the Gulf of Finland; light from the Southward over central and northern Russia, and from the North-Eastward in the north of Sweden. Variable over the greater part of southern Europe; Easterly in the south-west of France. Subsequently falling light in all parts of the United Kingdom, and backing to the South-Westward in the west of Ireland. Gales from various directions springing up in the south of Scandinavia.

Barometer highest, 30·1 ins. and upwards in a long band extending from the Atlantic across the extreme south-west of our Islands and the greater part of France to south Germany and the north of Austria. Lowest, 29·3 ins. and less in a depression over the Gulf of Bothnia and the north of Sweden, 29·5 ins. and less in a secondary system extending south-westwards to Denmark. Secondary depression subsequently moving eastwards and becoming much deeper, shallow disturbances beginning to approach own own western coasts.

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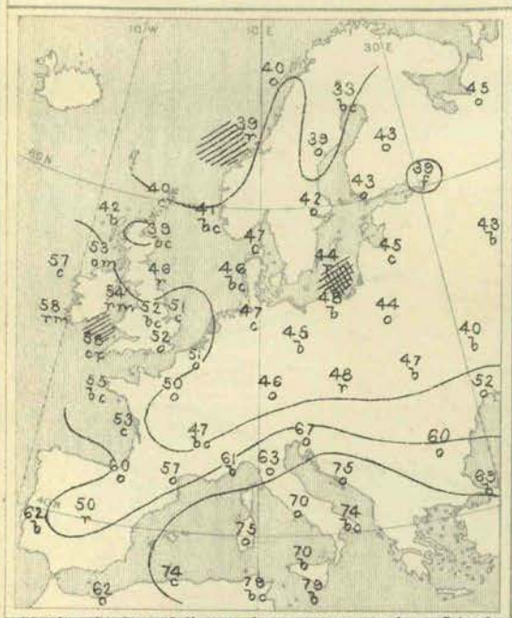
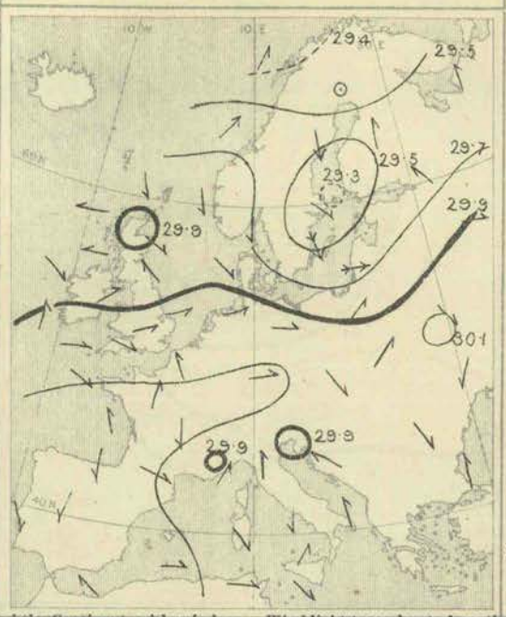
Tuesday, 26th September.

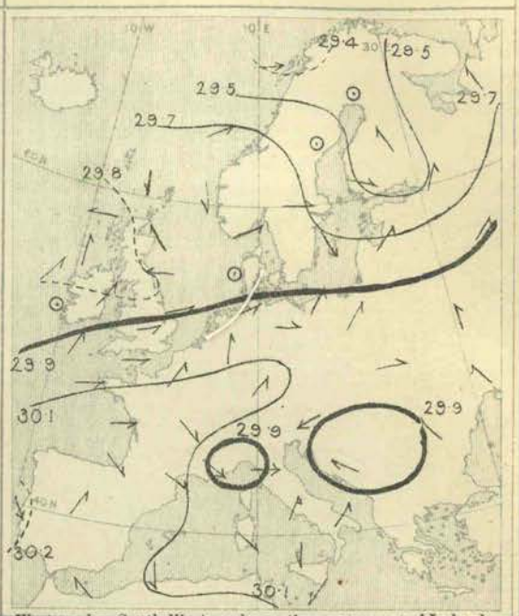
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather cloudy or dull over the greater part of our Islands and the Continent, with rain in Ireland, the north of England, and the south of Scotland, as well as at some of the Scandinavian, Russian and Austrian stations, and with passing showers in the south-west of England. Fine in the north and east of Scotland, as well as in the south-east of France and the south of Italy. Rain falling during day in nearly all parts of western Europe—heavily in places. Lunar halo seen in London.

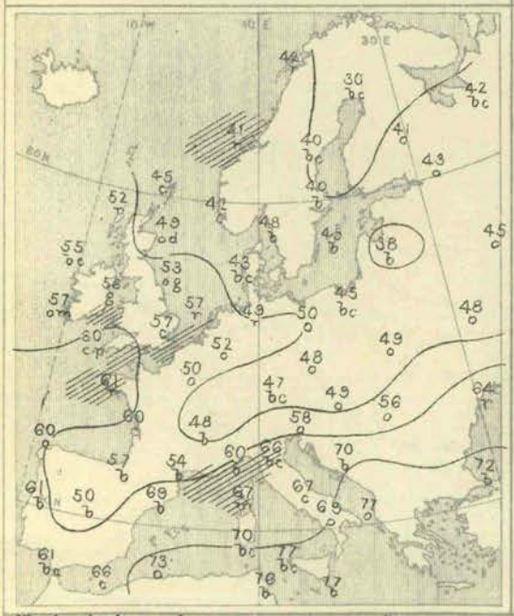
Temperature risen in the south of our Islands, fallen in Sweden, Russia, Austria, and Italy; changed irregularly elsewhere. Morning readings highest, 80° at Sfax, 79° at Tunis and Malta, and 75° at Lésina and Cagliari; above 60° in most other parts of southern Europe, but as low as 50° at Madrid. Lowest, 33° at Haparanda, 37° at Nairn, and 39° at Hernösand, Christiansund, and Aberdeen, below 45° in Scandinavia, the northern and central parts of Russia, and the north of Scotland. Rising during day to between 60° and 65° at most of the English and Irish stations, to 70° or more in Spain and the south of France, and to 80° or more in Italy, the highest reading of all being 102° at Palermo.

Wind light to moderate from the Westward or South-Westward over the greater part of Ireland and England, as well as in Germany and the north of France; variable in Scotland; South-Westerly in the west of Norway. North-Westerly in Denmark and the south of Scandinavia, with a strong gale at Wisby; gale from West reported at Memel; light Southerly in Finland. Northerly in the south of Russia, North-Westerly in Austria. Variable in Italy, Algeria, and the south of France, Northerly in Spain. Easterly and South-Easterly winds setting in later over the northern parts of the United Kingdom; no important change occurring elsewhere.

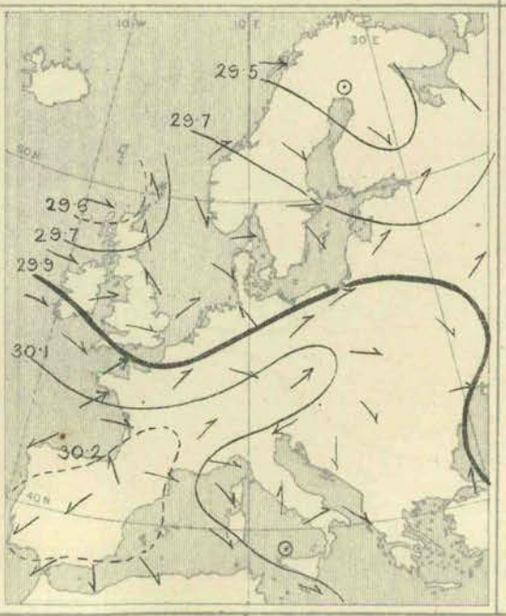
Barometer highest, 30·1 ins. and upwards in an anticyclone lying over France, the Spanish Peninsula, and the western part of the Mediterranean. Lowest, 29·4 ins. and less in two depressions—one off the north-west of Norway and the other near the mouth of the Gulf of Finland; 29·8 ins. and less in a shallow system over the north of Ireland; 29·9 ins. and less in small areas lying over the south-east of France and over the north of the Adriatic. Depression over north of Ireland spreading later over all the more northern parts of the United Kingdom, and barometer falling slowly over the whole of western Europe.

Wednesday, 27th September.

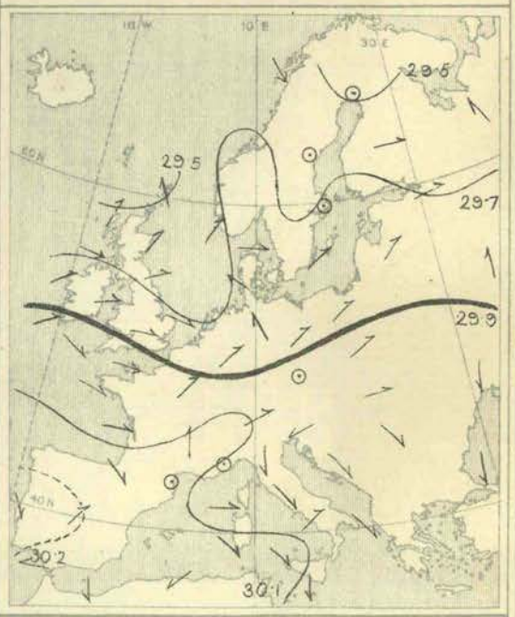
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather cloudy over the greater part of western Europe, with rain in many parts of our Islands, as well as in the west of Norway, and at one or two of the French and German stations. Fine and bright over Sweden, Denmark, and the Baltic, as well as in Spain and the south of France, dull over Italy, Austria, and the central and southern parts of Russia, with rain at Odessa and Nicolaieff. Rain falling later in many parts of France, Germany, and Russia; thunderstorms occurring in the east and south-east of England, as well as at the Helder; lunar halos seen at several of our southern stations.

Temperature risen generally, but fallen in eastern Germany, Italy, and Algeria. Morning readings highest, 77° at Brindisi and Malta, 73° at Algiers, and 72° at Palermo and Constantinople; above 60° in most parts of southern Europe, as well as at some of the Channel stations. Lowest, (1) 30° at Haparanda, 35° at Uleaborg, and 38° at Riga and Moscow; (2) 43° at Nairn, and 45° at Sumburgh Head. Rising during day to between 65° and 67° over the central and southern parts of England; exceeding 70° over southern Europe generally, and exceeding 80° in the south of Italy.

Wind light to moderate from the Westward over the west and south of our Islands and the greater part of France, and from the Southward on our north and north-east coasts, as well as in Germany. South-Westerly or Westerly in the west of Norway, North-Westerly over Finland, Sweden, Denmark, and the south of Norway. Variable in Austria and the south of Russia, as well as in the south of France; South-Westerly in Italy, North-Easterly over the Spanish Peninsula. Subsequently backing to the South-Westward in the west of Ireland; shifting to the North-Westward in Italy.

Barometer highest, 30·2 ins. and upwards over Spain and the south-western parts of France; 30·1 ins. and upwards over nearly the whole of central and south-western Europe. Lowest, 29·5 ins. and less in a depression over Lapland and Finland; 29·6 ins. and less in another disturbance off the north of Scotland, 29·7 ins. and less in a shallow secondary system off the north-east of England. No important change occurring during day, but barometer falling in most parts of western Europe.

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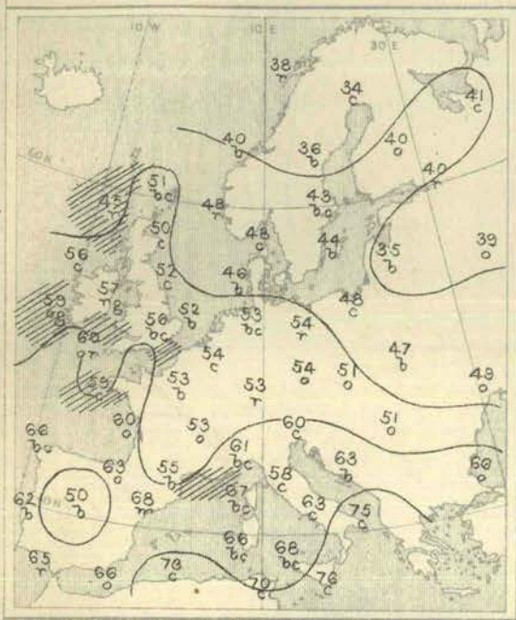
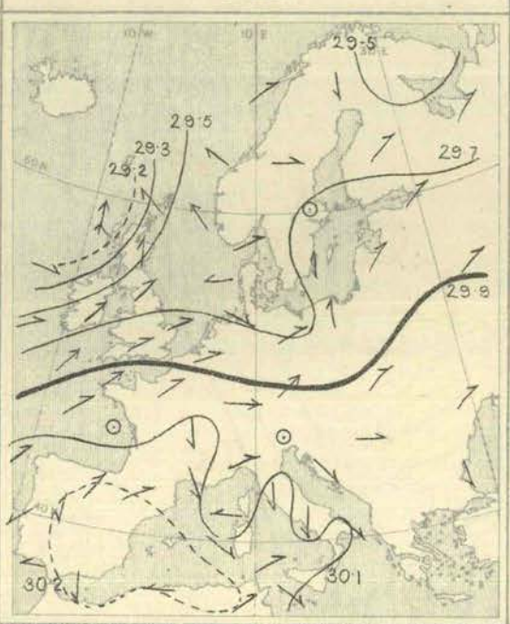
Thursday, 28th September.

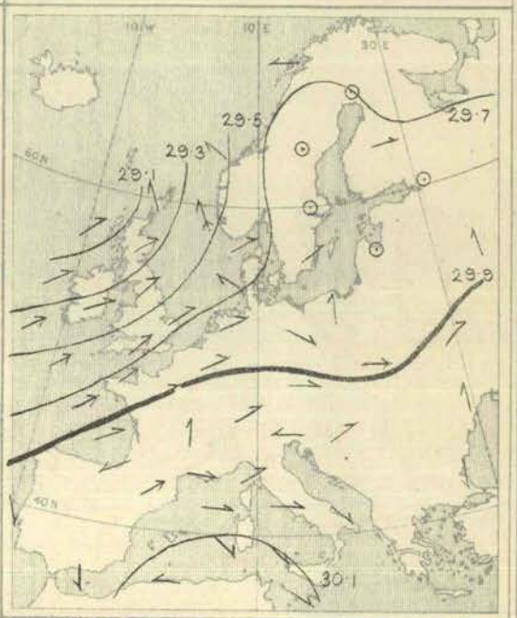
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather dull in the more western and northern parts of the United Kingdom, with rain in many places. Fine in the south-east of England, as well as over Sweden, Denmark, the Baltic, and the greater part of France, Spain, and Italy; dull at most of the Russian and Austrian stations, rainy in the west of Norway. Rain falling later over the whole of our Islands, as well as in the Netherlands and the north of France—amounts large at some of our south-western and southern stations. Thunder and lightning occurring over Ireland at night.

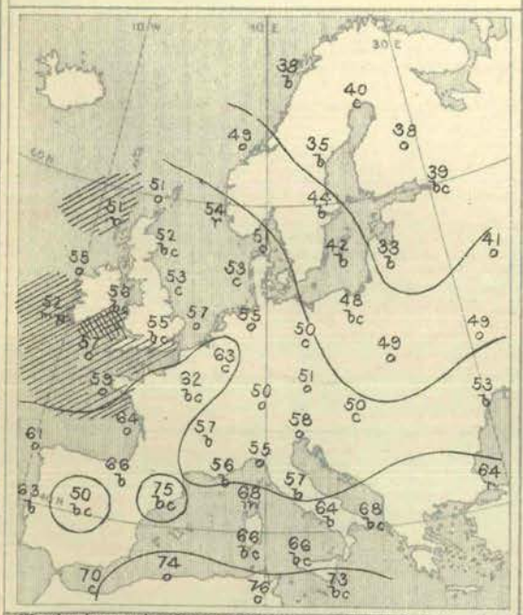
Temperature risen in Ireland, as well as in most parts of central Europe, fallen elsewhere. Morning readings highest, 76° at Malta, 75° at Brindisi, 73° at Algiers, and 70° at Sfax, reaching 60° or more on our extreme south and south-west coasts. Lowest, 34° at Haparanda, 35° at Riga, 36° at Hernösand, 37° at Helsingfors, and 38° at Bodö; below 40° over the northern parts of Russia and Scandinavia generally. Rising during day to between 60° and 65° in many parts of the United Kingdom. Exceeding 70° in nearly all parts of southern Europe, and exceeding 80° in the south of Italy.

Wind Southerly or South-Westerly over the whole of our Islands, fresh or strong in force in the west and north-west, with a gale at Stornoway. South-Westerly or Westerly over the Netherlands, Germany, Austria, and the northern parts of Russia, variable in Sweden and Denmark; South-Easterly in the west of Norway. North-Westerly in Italy; variable in Spain and the south of France. Subsequently increasing to a moderate or fresh gale from the South-Westward at some of the Channel stations.

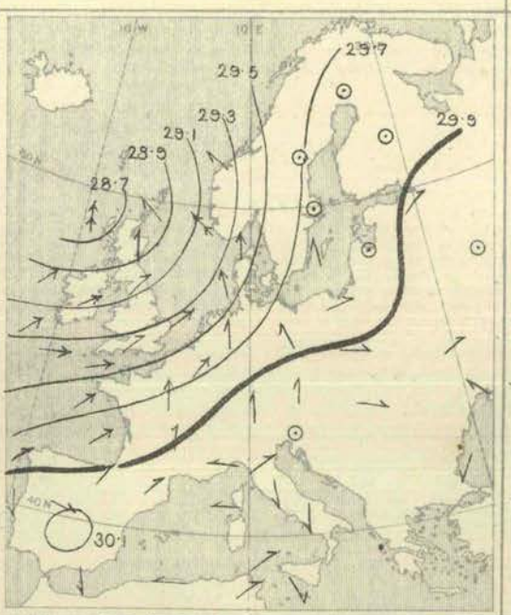
Barometer highest, 30·2 ins. and upwards over Spain and the western parts of the Mediterranean; 30·0 ins. and upwards over the more southern parts of Europe. Lowest, 29·2 ins. and less in a depression lying off the north-west of Scotland; gradients rather steep over our Islands. Depression subsequently spreading eastwards and southwards, and barometer falling in all parts of western Europe.

Friday, 29th September.

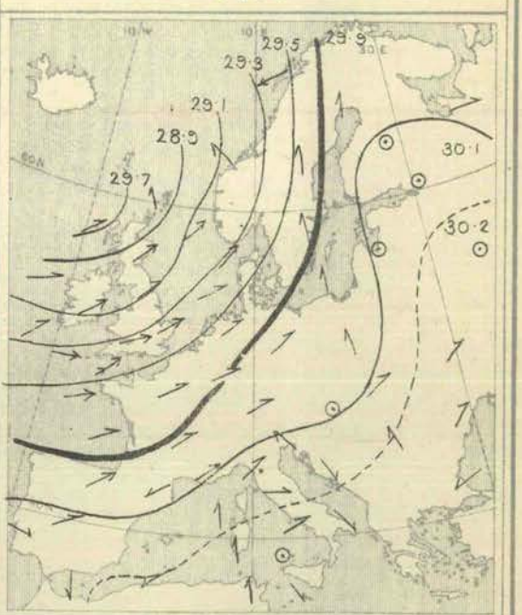
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine in most parts of Great Britain; cloudy and showery in Ireland and the west of Scotland; fine over Sweden and the Baltic, as well as over central France, and the greater part of southern and eastern Europe, dull in Germany, Austria, and the west of France, rainy in the south of Norway and also over the Netherlands. Showers later in most parts of our Islands; heavy rain over the west and north of France and the extreme south-east of England, and considerable quantities on the eastern shores of the North Sea. Lightning seen at Scilly, and over the east of Kent.

Temperature fallen in the west and south of our Islands, as well as in Russia, Germany, and Austria, risen in most other localities. Morning readings highest, 76° at Sfax, 75° at Barcelona, 74° at Algiers, and 73° at Malta, above 65° at most of the Mediterranean stations, and above 55° over the southern parts of England. Lowest, 32° at Helsingfors, 33° at Riga, 34° at Uleaborg, and 38° at Bodö and Kuopio. Rising during day to between 60° and 65° in many parts of England, and reaching 66° in London and at Cambridge; exceeding 70° over the southern parts of France, and exceeding 80° in the south of Italy.

Wind South-Westerly over our Islands, the Netherlands, and the west and north of France, light in force on our north-east coasts, but fresh or strong elsewhere, with a gale at Stornoway. Southerly in Germany; South-Easterly on the eastern shores of the North Sea (a gale in the south of Norway), calm or light and variable over Sweden, Russia, and Austria. Light from the Northward or North-Westward in Italy; variable in Algeria and the south of France. Subsequently moderating in force on our western coasts, but blowing very strongly in squalls over the south-east of England; no important change occurring elsewhere.

Barometer highest, 30·0 ins. and upwards over the greater part of southern and eastern Europe and the Mediterranean; 29·9 ins. and upwards over nearly the whole of Russia. Lowest, 28·7 ins. and less in a depression lying off the north-west of Scotland; gradients steep over the whole of north-western Europe. Depression subsequently moving northwards slowly, but small secondary disturbances advancing over various parts of our Islands and France.

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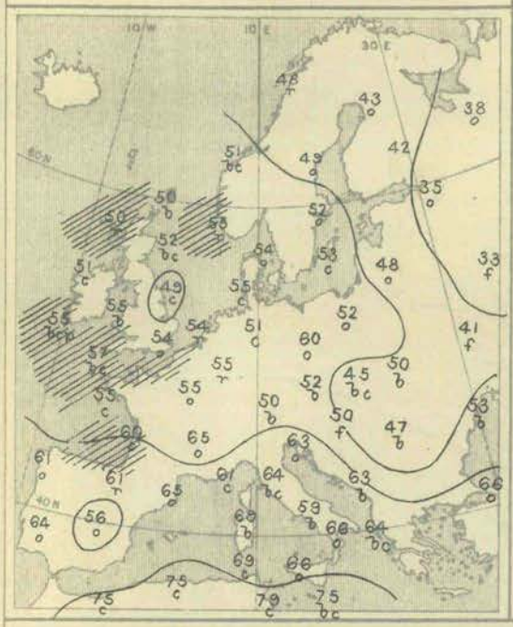
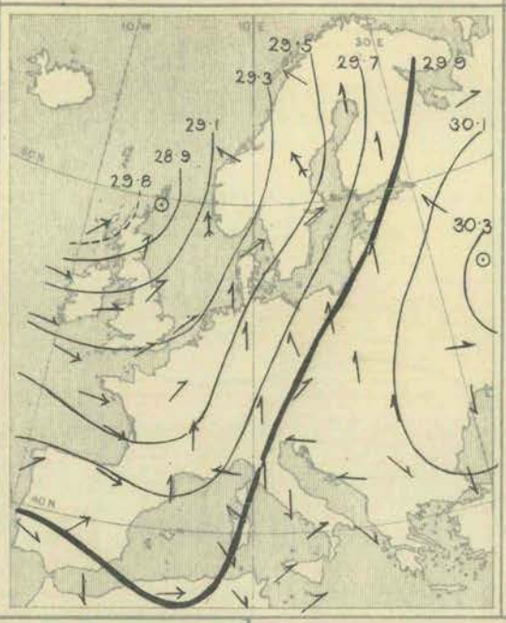
Saturday, 30th September.

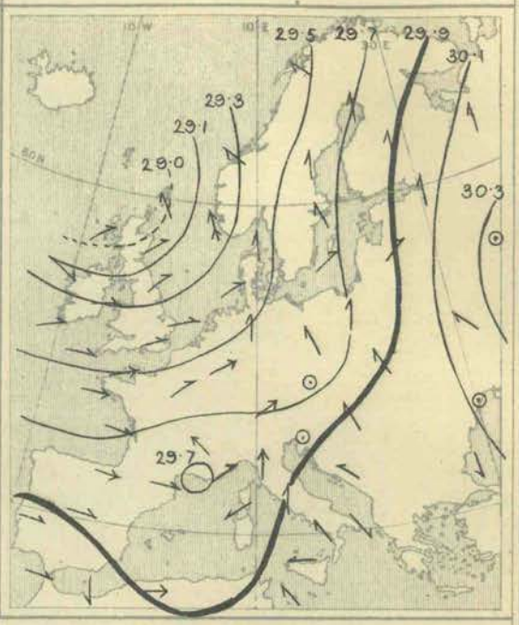
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine generally over the south-eastern parts of Europe, cloudy and unsettled in the west and north, with rain in many places, fog over Russia. Rain falling in nearly all parts of Europe—the amounts being heaviest over the northern half of Italy and at the French stations; thunderstorms over the Riviera.

Temperature in morning exceeding 70° over Algeria, and exceeding 60° at many stations in the south of Europe; lower elsewhere. Below 50° over northern Europe and the north-east of England, and as low as 33° at Moscow, 35° at St. Petersburg, 38° at Archangel, and 40° at Uleaborg. Rising to 60° and more over many parts of our Islands later, to between 70° and 80° over Italy and the south of France, and to 90° and more over Algeria.

Wind Westerly in the west of our Islands and over the Bay of Biscay, mainly Southerly over the eastern half of England, the North Sea, and continental Europe, very variable over the Mediterranean. Moderate to fresh in force as a whole, but blowing a gale at Skudesnaes. Veering Westwards over the southern half of England and north of France later, and blowing rather strongly in the Channel; becoming Southerly over the Riviera.

Barometer highest, 30·2 ins. and more to 30·0 ins. over Russia and south-eastern Europe, and exceeding 29·9 ins. over the southern half of the Iberian Peninsula. Lowest, 28·8 ins. and less over the Hebrides and neighbouring parts of the Atlantic; gradients moderate, but rather irregular. Rising during day except in the south of France, where a local disturbance began to appear.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force is indicated thus: ⇛ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze: and ⊙ = a calm. In the left-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Germany, Sweden, and Norway, and 7 a.m. in France, Algeria, Italy, Austria, and Russia; that for 6 p.m. is prepared from observations made at 6 p.m. in the British Islands and France, 7 p.m. in Algeria, 8 p.m. in Sweden and Norway, Germany, and Austria, and 9 p.m. in Russia, Belgium, and Italy. The time indicated in each case is the standard time for each country.

GENERAL NOTES.

At the commencement of the week an anticyclone spread from the Atlantic over the southern parts of the United Kingdom and the north of France, the lowest pressures being found in a well-marked cyclonic system lying over Denmark. The anticyclone soon moved away, however, to the southward, and for the remainder of the period the weather over north-western Europe was influenced by a series of depressions which skirted our extreme north-western and northern coasts. The winds, which were originally from the North-Westward, consequently backed to the Westward or South-Westward, and on the 28th and 29th, when a deep depression lay near the Hebrides, they blew strongly in most places, with a slight gale at some of the Channel stations, and with squally, showery weather. At the close of the week the depression was slowly filling up and moving away to the northward, and the wind was, therefore, moderating in strength. Over southern Europe the weather was mostly fair, with light variable breezes and a fairly high temperature for the time of year.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 230.

Stations.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	Stations.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	23·9	?	29	?	EASTBOURNE	29·8	?	36	?
OSWALDKIRK (Yorkshire)	25·5	?	31	?	TENBY	30·1*	?	37*	?
WORKSOP	24·7	+ 2·2	30	+ 3	NEWQUAY	31·0	?	38	?
THURCASTON (Leicestershire)	29·7	+ 8·0	36	+ 9	TORQUAY	37·5*	?	46*	?
MARGATE	27·1	?	33	?	ARLEY COTTAGE (County Cavan)	25·0	?	30	?
WESTBOURNE (Sussex)	35·2*	?	43*	?	GUERNSEY	32·9*	?	40*	?
BRIGHTON	31·8	?	39	?					

* The values at Westbourne, Tenby, Torquay and Guernsey are obtained by Jordan's Photographic Recorder.

Judd & Co Ltd, Lith. 63, Carter Lane.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; R. H. SCOTT, F.R.S., SECRETARY.

By whom Subscriptions, payable in advance, can be received.

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VOL. X. No. 40.] *Third Series.* WEEK ENDING SATURDAY, 7TH OCTOBER, 1893. [*Price 6d.* *Annual Subscription, post paid, £1 10s. 0d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871-90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the twenty-five years 1866-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the ten years 1881-90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

	DISTRICTS. (See p. 236.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 1st, 1893. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	58	35	53·1	41·9	47·4	1 below.	38	− 7	0	− 4	2203	+538	491	− 58
	1. SCOTLAND, EAST	61	28	55·4	38·5	46·7	2 below.	48	+ 1	10	+ 6	2455	+328	562	− 13
	2. ENGLAND, N.E.	64	34	56·4	40·4	48·2	2 below.	50	− 9	4	+ 1	2678	+407	440	− 61
	3. ENGLAND, EAST	67	36	60·9	42·7	51·6	0 (average)	67	+ 1	0	− 3	3121	+489	524	− 42
	4. MIDLAND COUNTIES	67	35	59·2	40·5	49·6	1 below.	59	− 3	4	− 1	3218	+636	509	− 52
	5. ENGLAND, SOUTH	66	38	60·3	46·2	53·0	0 (average)	77	+ 4	0	− 3	3404	+561	373	− 46
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	60	29	54·9	40·2	47·3	3 below.	45	−13	5	+ 2	2659	+478	359	− 60
	7. ENGLAND, N.W.	62	36	56·7	43·9	50·1	2 below.	57	− 2	0	− 1	3065	+692	323	− 93
	8. ENGLAND, S.W.	65	35	58·0	44·5	51·1	2 below.	64	− 6	0	− 1	3320	+690	246	− 71
	9. IRELAND, NORTH	64	30	54·8	40·7	47·5	3 below.	44	−16	4	+ 3	2878	+553	262	−101
	10. IRELAND, SOUTH	64	30	56·6	40·9	48·5	4 below.	50	−20	3	+ 2	3218	+600	181	− 98
	—CHANNEL ISLANDS	66	49	60·4	51·4	55·8	0 (average)	97	+ 5	0	0	3773	+827	70	− 52

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 236.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the mean for the Week.	From Jan. 1st, 1893. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 1st, 1893. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of ins.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	6	8	3 less.	182	0	35·0	− 0·1	14	− 6	18	− 8	933	− 99	25	− 3
	1. SCOTLAND, EAST	4	5	3 less.	146	− 4	19·6	− 4·1	32	+ 2	41	+ 2	1227	+ 27	33	+ 1
	2. ENGLAND, N.E.	3	6	1 less.	124	−14	15·5	− 4·1	38	+17	49	+ 24	1374	+273	37	+ 7
	3. ENGLAND, EAST	6	8	1 more.	122	−15	14·1	− 5·3	47	+18	59	+ 24	1626	+292	44	+ 8
	4. MIDLAND COUNTIES	6	10	3 more.	120	−12	15·0	− 6·6	39	+15	50	+ 22	1540	+348	42	+ 10
	5. ENGLAND, SOUTH	7	15	8 more.	118	−11	16·3	− 4·0	41	+13	52	+ 16	1676	+380	46	+ 11
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	6	14	3 more.	146	−12	27·8	− 8·7	35	+13	45	+ 17	1385	+196	37	+ 5
	7. ENGLAND, N.W.	6	17	9 more.	136	− 8	22·7	− 2·9	31	+10	39	+ 13	1367	+188	37	+ 5
	8. ENGLAND, S.W.	7	20	10 more.	124	−24	23·7	− 5·6	38	+10	48	+ 15	1759	+353	48	+ 10
	9. IRELAND, NORTH	5	10	2 more.	157	−14	25·0	− 1·9	34	+14	44	+ 18	1202	+123	32	+ 3
	10. IRELAND, SOUTH	5	7	2 less.	137	−18	22·8	− 6·2	43	+20	55	+ 28	1252	+ 94	37	+ 3
	—CHANNEL ISLANDS	7	12	3 more.	131	−25	20·5	− 3·0	41	+ 7	51	+ 8	2059	+413	57	+ 12

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather during this period was again very changeable and showery, frequent heavy falls of rain alternating with intervals of bright sunshine. Much lightning was observed from time to time, and in many parts of England and the south of Scotland thunderstorms were experienced.

Temperature was somewhat below the mean in nearly all districts, but just equalled it in England S. and E. and the Channel Islands. The highest of the maxima were registered on October 1st, and ranged from 58° in Scotland N. to 67° in England E. and the Midland Counties. The lowest of the minima were recorded on the 4th over Great Britain and on the 7th over Ireland, when they ranged from 28° in Scotland E., 29° in Scotland W., and 30° over both the Irish districts, to 38° in England S., and to 49° in the Channel Islands.

Rainfall was rather less than the mean in Scotland N. and E. and England N.E., as well as in Ireland S. In all other districts there was an excess, that in all the western and southern parts of England being large.

Bright Sunshine, notwithstanding the frequency of rain, was very prevalent generally, and exceeded the normal in all districts excepting Scotland N. The percentage of the possible duration which was actually recorded ranged from 59 in England E. to 39 in England N.W. In Scotland N., however, the percentage was no higher than 18.

Barometer and Wind.—During the whole of this period depressions passed eastwards or north-eastwards over or to the northward of our Islands. The former were, as a rule, secondary to the latter, and, although the barometer was much below the average height, none of the disturbances were very deep. South-Westerly and Westerly breezes of moderate force were most prevalent, but in the north of Scotland the winds were rather more variable in direction, and blew during the middle of the period from the Eastward.

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II.—DATA from which the SUMMARY on page 235 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°				Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head ⚓	55	44	53·7	46·9	50·2	+2·5	57	0	6	0·43	−0·47	*	*	*	*
	Stornoway	55	35	52·3	41·4	46·7	−1·2	35	2	7	1·34	+0·30	15·8	−6·2	21	−8
	Wick	58	39	52·9	43·4	48·0	−0·4	42	0	5	1·32	+0·68	*	*	*	*
	Lairg ⚓	57	36	53·2	39·1	45·9	−1·9	39	8	5	0·89	−0·19	*	*	*	*
	Glencarron ⚓	56	35	53·0	39·3	46·0	−1·5	39	8	5	0·72	−1·10	*	*	*	*
	Fort Augustus ⚓	57	35	54·2	40·7	47·3	−1·4	43	4	5	0·33	−0·63	5·6	?	7	?
	Fort William ⚓	55	35	52·7	42·4	47·4	−2·2	38	0	6	1·05	−0·68	20·2	?	26	?
1. SCOTLAND, E.	Nairn	60	28	55·0	38·0	46·3	−2·7	47	11	4	0·42	−0·16	*	*	*	*
	Aberdeen	60	36	55·0	40·9	47·7	−1·7	45	3	5	0·25	−0·43	23·8	+1·2	31	+2
	Braemar ⚓	52	30	50·9	36·5	43·5	−2·3	34	15	5	0·24	−0·64	19·7†	?†	25†	?†
	Ochtertyre ⚓	61	32	58·9	37·7	48·1	−0·6	61	12	4	0·39	−0·50	*	*	*	*
	Leith	60	36	56·9	41·9	49·2	−1·6	51	0	3	0·86	+0·42	*	*	*	*
	Marchmont ⚓	60	31	55·4	36·1	45·5	−2·6	49	17	4	0·53	−0·19	46·0	?	59	?
2. ENGLAND, N.E.	Alnwick Castle	58	34	53·3	39·1	46·0	−3·2	40	8	2	0·70	+0·08	*	*	*	*
	Durham	61	36	57·5	37·9	47·4	−2·1	55	11	3	0·39	−0·25	44·1	+24·1	57	+31
	Shields	63	36	56·6	39·7	47·9	−2·3	51	6	2	0·25	−0·37	*	*	*	*
	Scarborough ⚓	59	37	54·6	41·3	47·8	−3·3	44	2	2	0·40	−0·28	*	*	*	*
	York	62	35	57·6	38·1	47·6	−3·2	56	11	6	1·17	+0·57	33·8	+13·8	43	+17
	Spurn Head	64	43	58·9	46·0	52·3	−0·1	72	0	4	0·39	−0·12	*	*	*	*
3. ENGLAND, E.	Hillington ⚓	66	38	61·1	41·5	51·0	−0·2	65	1	6	0·53	−0·07	46·4	+22·7	59	+29
	Yarmouth	61	41	58·4	45·7	51·9	−0·2	69	0	6	0·56	−0·11	*	*	*	*
	Geldeston	67	39	62·3	43·3	52·5	+0·3	74	0	5	0·31	−0·29	44·1	+15·6	56	+21
	Cambridge	67	36	62·7	41·7	51·9	+0·1	71	1	5	0·92	+0·42	44·6	+17·8	56	+23
	Rothamsted	63	38	60·2	41·5	50·6	−0·2	62	1	6	1·43	+0·75	52·5	?	66	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	64	35	60·0	39·4	49·4	−1·4	63	7	6	0·86	+0·21	*	*	*	*
	Loughborough	67	35	61·9	40·7	51·0	−0·3	68	4	4	0·75	+0·10	*	*	*	*
	Stamford (Ketton Hall)	65	38	60·6	39·7	49·8	−1·5	64	6	6	1·52	+0·86	*	*	*	*
	Cheadle ⚓	60	38	56·7	40·8	48·5	−0·9	51	3	5	0·27	−0·50	*	*	*	*
	Churchstoke ⚓	60	36	57·6	40·3	48·7	−1·0	54	5	6	1·18	+0·45	34·4	+11·4	44	+14
	Hereford ⚓	65	38	59·9	41·3	50·3	−0·8	61	2	5	0·31	−0·34	*	*	*	*
	Cirencester	64	36	57·3	39·0	47·9	−2·4	54	8	6	1·60	+0·86	37·2	+14·2	47	+17
	Oxford	65	41	59·7	43·4	51·3	−0·5	65	0	7	1·57	+0·93	41·9	+17·1	53	+20
5. ENGLAND, S.	London	66	42	62·1	44·3	52·9	+0·1	76	0	6	0·72	+0·12	43·2†	+22·7†	55†	+29†
	North Foreland	62	47	59·9	51·0	55·3	+1·4	93	0	5	1·10	?	*	*	*	*
	Strathfield Turgiss ⚓	62	38	59·7	41·3	50·2	−1·4	60	2	7	1·21	+0·58	*	*	*	*
	Dungeness	66	45	61·3	49·9	55·4	+1·5	94	0	6	2·05	+1·35	*	*	*	*
	Hastings (St. Leonards)	63	43	60·0	47·4	53·5	−0·5	81	0	7	2·49	+1·72	38·3	+7·1	48	+8
	Southampton	62	40	60·8	44·3	52·3	−0·8	72	0	7	1·59	+0·82	37·3	+8·8	47	+12
	Hurst Castle	65	44	61·0	48·3	54·5	+0·6	88	0	7	1·75	+1·02	*	*	*	*
	Stowell ⚓	61	41	57·8	42·8	50·1	−1·0	57	0	7	1·33	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	59	32	54·7	41·1	47·7	−2·0	44	3	6	1·67	−0·08	*	*	*	*
	Glasgow	55	32	52·3	41·2	46·6	−2·6	36	2	5	1·23	+0·39	23·3	+5·8	30	+7
	Ardrossan	60	35	55·7	43·0	49·2	−1·7	50	0	5	1·35	+0·45	*	*	*	*
	Glenlee ⚓	60	29	56·4	36·3	46·1	−2·7	53	16	7	1·10	−0·20	*	*	*	*
	Douglas (Isle of Man)	58	36	55·4	39·3	47·1	−3·6	47	8	6	1·85	+0·92	46·5	+20·7	59	+26
7. ENGLAND, N.W.	Stonyhurst	57	36	53·8	41·5	47·5	−2·7	41	1	6	3·37	+2·17	35·6	+13·6	45	+17
	Blackpool ⚓	61	39	58·3	42·9	50·4	−0·5	59	0	6	2·13	+1·21	30·4	+8·4	38	+10
	Manchester	61	38	56·8	41·3	48·8	−1·8	51	2	7	1·32	+0·42	25·6†	?	32†	?
	Liverpool Obsy. (Bidston)	59	44	56·3	45·3	50·6	−1·3	60	0	6	1·34	+0·48	*	*	*	*
	Llandudno ⚓	62	42	56·9	45·5	51·0	−1·9	63	0	6	1·20	+0·38	31·1	+11·9	39	+14
	Holyhead	62	44	58·1	47·1	52·4	−0·8	73	0	6	1·41	+0·53	*	*	*	*
8. ENGLAND, S.W.	Llandovery	65	35	59·0	37·1	47·7	−3·9	60	14	7	1·84	+0·66	*	*	*	*
	Pembroke	60	47	57·0	49·3	53·0	−0·2	77	0	7	0·99	+0·07	37·2	+11·2	47	+14
	Bristol (Montpelier)	65	40	58·5	44·7	51·4	0·0	66	0	6	2·63	?	*	*	*	*
	Arlington (N. Devon)	60	40	56·8	42·9	49·4	−2·6	52	0	7	3·79	+2·59	*	*	*	*
	Cullompton ⚓	63	36	59·1	39·6	49·1	−3·0	60	7	7	1·14	+0·24	36·1	+12·1	46	+15
	Falmouth	60	45	57·4	47·3	52·2	−1·7	71	0	7	2·85	+1·60	40·9	+13·9	51	+16
	Plymouth	62	43	58·9	46·6	52·6	−1·1	74	0	7	1·30	+0·48	33·1	+5·9	42	+7
	Prawle Point	60	45	58·0	48·6	53·2	−0·5	78	0	5	1·24	+0·46	*	*	*	*
9. IRELAND, N.	Malin Head	56	42	52·4	45·3	48·8	−0·9	48	0	6	0·89	?	*	*	*	*
	Londonderry	62	37	56·7	41·1	48·7	−1·6	51	3	6	1·44	+0·52	*	*	*	*
	Edenfel (Omagh)	55	34	53·3	38·1	45·5	−3·6	41	11	5	0·98	+0·13	*	*	*	*
	Belmullet	57	42	53·6	46·0	49·7	−3·2	54	0	7	2·33	?	*	*	*	*
	Markree Castle	59	32	55·0	36·6	45·5	−4·1	47	15	6	0·90	+0·10	29·1	+9·9	37	+11
	Brookeborough	58	32	54·8	37·0	45·6	−3·2	46	14	4	0·45	−0·45	*	*	*	*
	Armagh	58	33	55·5	39·1	47·1	−2·5	48	8	5	0·75	+0·10	38·9	+18·6	49	+23
	Donaghadee	64	40	56·9	42·4	49·4	−1·5	52	0	6	0·61	−0·07	*	*	*	*
	Edgeworthstown	?	30	?	35·8	?	?	?	?	4	0·59	−0·11	*	*	*	*
10. IRELAND, S.	Dublin	59	38	56·5	42·6	49·3	−2·4	51	0	5	0·17	−0·43	49·2	+24·0	62	+30
	Parsonstown	60	33	56·1	39·0	47·3	−2·7	50	8	3	0·42	−0·28	38·7	+15·7	49	+11
	Kilkenny	61	30	56·1	36·3	45·9	−5·4	51	16	5	0·28	−0·34	*	*	*	*
	Waterford	64	31	58·9	37·8	48·0	−4·8	60	12	3	0·37	−0·45	*	*	*	*
	Roche's Point	60	42	57·9	45·0	51·3	−1·7	65	0	3	0·08	−0·81	*	*	*	*
	Valencia	58	38	56·6	45·4	50·8	−2·9	62	0	6	0·97	−0·18	41·7	+18·7	53	+22
	Killarney	58	30	56·1	38·3	46·9	−5·2	50	10	6	1·38	?	*	*	*	*
	Foynes	56	36	54·4	42·5	48·3	−2·6	44	0	5	1·86	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	62	49	58·7	50·3	54·4	−0·9	87	0	7	0·89	+0·05	*	*	*	*
	Jersey	66	49	62·1	52·4	57·1	+0·9	106	0	7	1·41	+0·53	39·1	+7·3	49	+8

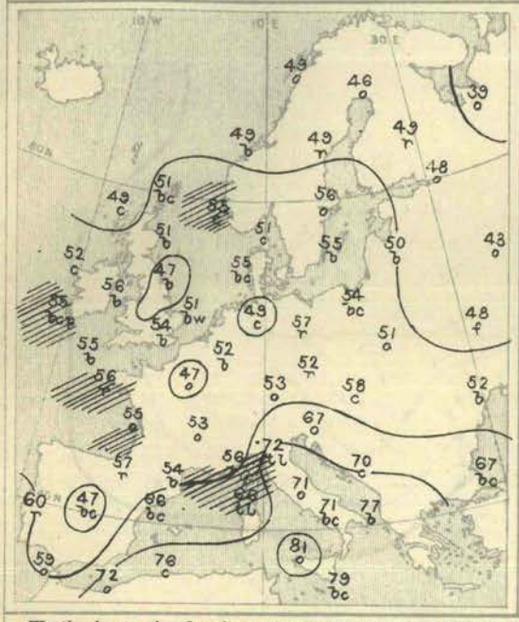
⚓ Stations marked ⚓ are in connection with the Royal Meteorological Society, and those marked ⚓ with the Scottish Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

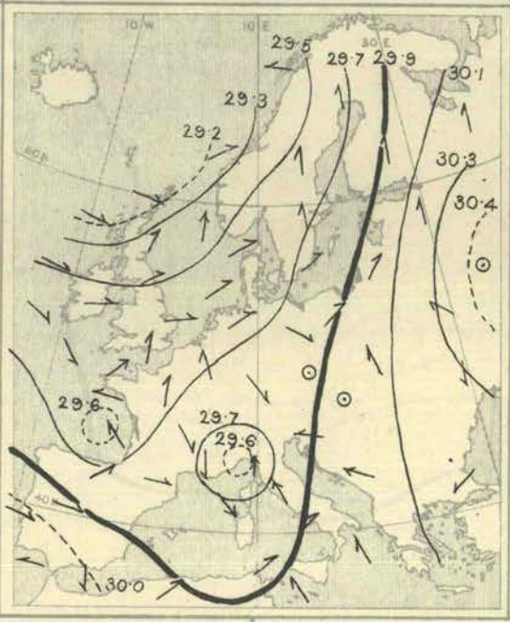
† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row) at the Kew Observatory, and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

Sunday, 1st October.

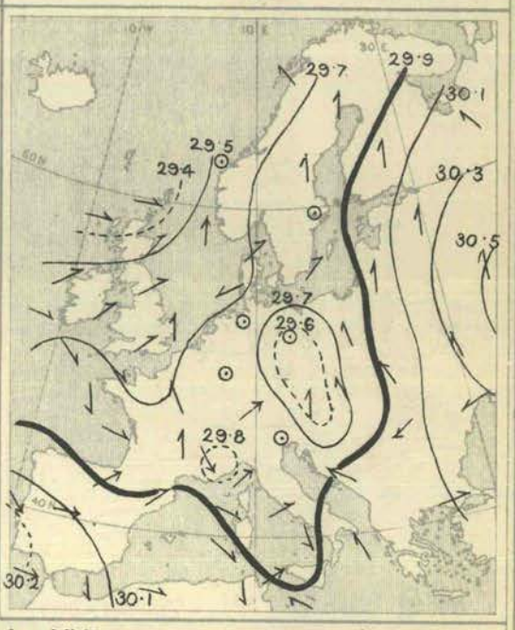
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine, but not settled, over the British Islands, the North Sea, and north of France, dull and unsettled over the Continent, with rain in many places, thunder and lightning at Donaghadee. Rain later over the southern parts of our Islands and the Continent, and some local falls in the northern and western parts of Scotland and Ireland; thunder in the south-west of London, shortly before 1 p.m., and in the west of France later.

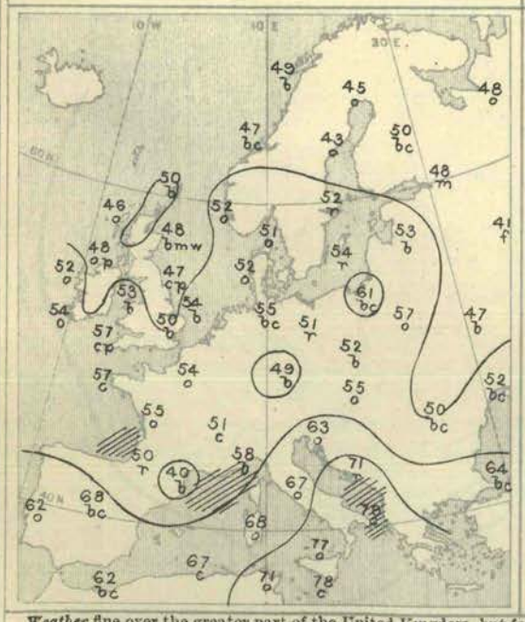
Temperature in morning highest, 75° to 81° on the southern side of the Mediterranean, but below 60° over Europe as a whole, and below 50° in many places. Lowest, 39° at Archangel, 43° at Moscow, 44° at Parsonstown, 46° at Odessa, Ulcaborg, and Le Mans, 47° at Paris, Cambridge, and York; 49° at Stornoway and Wick. Rising later to between 60° and 67° over Great Britain and France, to 70° or more over southern Europe generally, and to 80° or more at several of the Italian stations, falling below 40° over our north midland counties in the night.

Wind Westerly to North-Westerly and light on our west and south-west coasts, Southerly in the east, and also over the northern parts of the Continent. Very light and variable over central Europe, Easterly in the south of Russia; strong and completely cyclonic over the northern parts of the Mediterranean. Beginning to back to the South-Westward over the north-west of our Islands later, but veering Westward over England. Well-marked cyclonic circulation appearing over Germany.

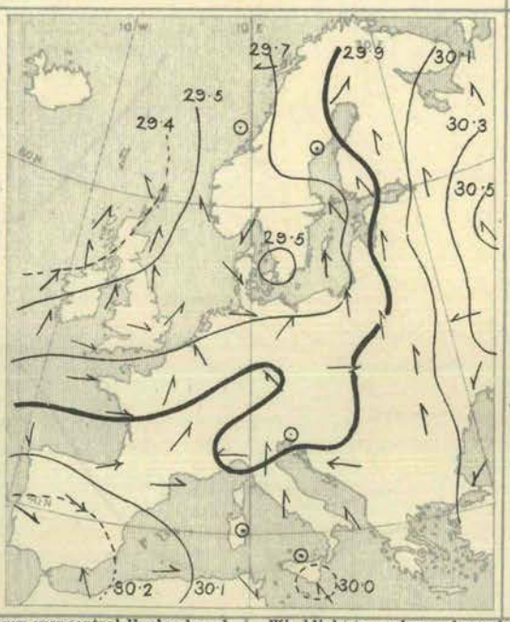
Barometer highest, 30·4 ins. and more to 29·9 ins. over Russia, and exceeding 30·0 ins. over the extreme south of the Spanish Peninsula. Lowest, 29·2 ins. and less over the Shetlands and extreme north of Scotland; 29·6 ins. and less in a depression over the Gulf of Genoa. Rising slowly later over western Europe and the British Islands, and briskly over northern Europe; falling decidedly over central Europe, and new depression appearing over eastern Germany.

Monday, 2nd October.

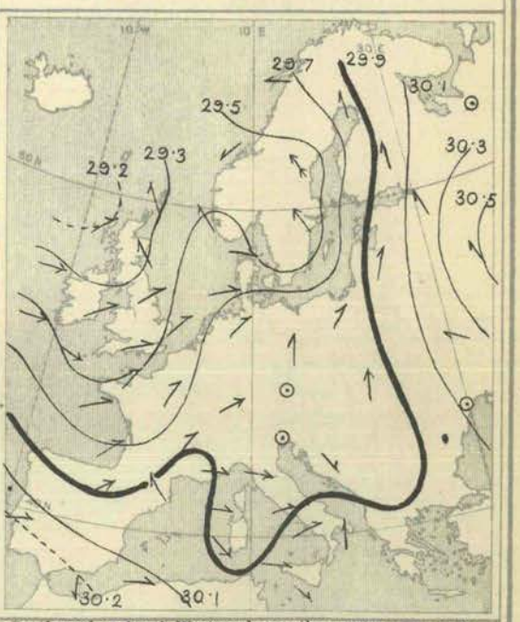
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fine over the greater part of the United Kingdom, but foggy over central England, and showery on our extreme south and south-west coasts. Dull at many of the Continental stations, with rain in Denmark and the south of Scandinavia; fine in the west of Norway, Finland, and the Baltic Provinces, as well as over south Germany, and the central and southern parts of Spain. Showers falling during day over nearly the whole of our Islands, and heavy rain at some of the French and Scandinavian stations; thunder and lightning occurring in many parts of Great Britain and France.

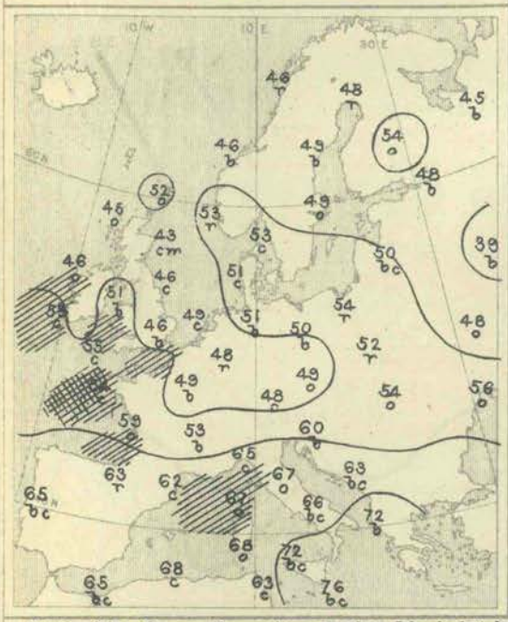
Temperature changed very irregularly. Morning readings highest, 79° at Brindisi, 78° at Malta, 77° at Palermo and Sfax, and 72° at Corunna and Aumale; above 60° over southern Europe generally, and above 55° over the English Channel. Lowest, (1) 40° at York, and 41° at Loughborough; (1) 41° at Moscow, 43° at Hernösand, and 45° at Haparanda; below 50° at several of the more northern stations in our Islands and the Continent. Rising during day to 60° or a little more in most parts of England and Germany, exceeding 70° over southern Europe generally, and exceeding 80° in the south of Italy.

Wind light to moderate from the Southward or South-Westward over the greater part of the United Kingdom, but Westerly in the south-west of England, as well as in Spain and the west and south of France. Well-marked cyclonic circulation reported over Denmark, the Baltic, and the south of Scandinavia, with strong winds at several of the Baltic stations. Light from the Eastward or North-Eastward in the south of Russia; variable in Italy and Algeria. Subsequently veering to the Westward in Ireland, but backing to the South-Westward in the west of France. Increasing to a gale from the South-Eastward in central Sweden.

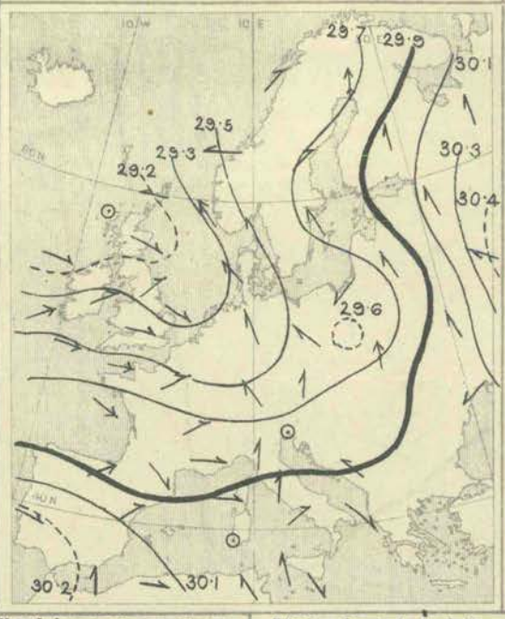
Barometer highest, 30·5 ins. and upwards in an anticyclone lying over contral Russia; 30·2 ins. and upwards over the southern parts of Spain. Lowest, 29·4 ins. and less in a large shallow depression lying to the north-west of our Islands; 29·5 ins. and less in a smaller disturbance over the extreme south of Sweden. Depression in north-west subsequently spreading eastwards and south-eastwards over the United Kingdon, and barometer falling in all parts of western Europe. Disturbance over south of Sweden moving slowly northwards.

Tuesday, 3rd October.

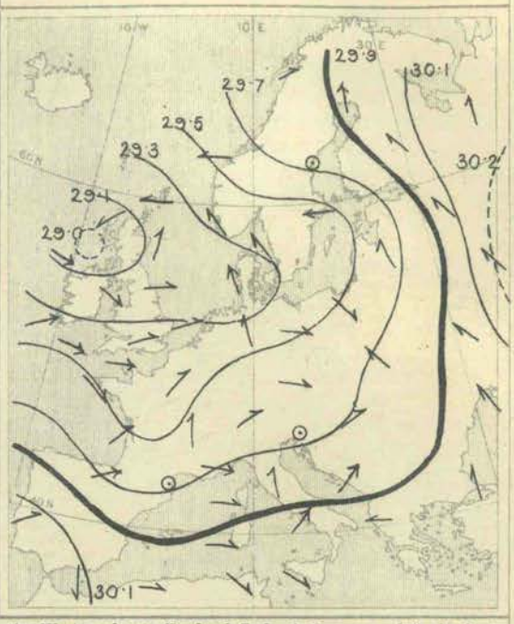
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fair or fine over the greater parts of our Islands, but dull and showery on our extreme north-west coasts. Fine in many parts of Germany, France, Spain, and the south of Italy, and also in central Russia, cloudy or overcast in most other parts of the Continent, with rain over the west of Norway, Poland, and the Baltic Provinces, as well as at Brussels, Wiesbaden, and Biarritz. Showers falling later in many parts of the United Kingdom, and heavy rain at several of the Continental stations. Thunder occurring at Loughborough and lightning seen over the greater part of England at night; aurora in the north of Scotland.

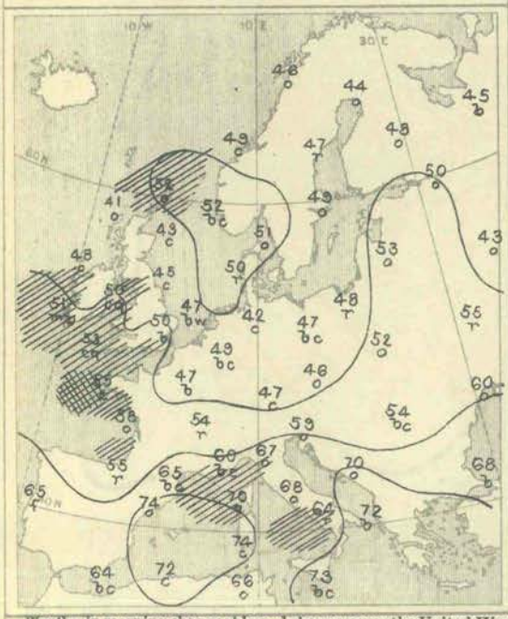
Temperature fallen in most places. Morning readings highest, 80° at Sfax, 76° at Malta, and 72° at Brindisi and Palermo, and above 60° over southern Europe and the Mediterranean generally. Lowest, (1) 39° at Moscow, 45° at Archangel, and 46° at Kiev; (2) 42° at Donaghadee, 43° at Aberdeen, and 44° at Malin Head, below 50° in all but the extreme northern and southern parts of the United Kingdom. Daily maxima below 60° over our Islands generally, as well as in the northern parts of France; thermometer exceeding 70° in many parts of southern Europe, the highest reading of all being 79° at Cagliari.

Wind moderate to fresh from the Westward over England, Ireland, France, and Spain, but variable in Scotland. Light to moderate from the Southward in Italy, and from the South-Eastward over Germany, Denmark, Russia, the Baltic, and the south of Scandinavia; variable in Austria and also in Algeria. No important change occurring during day.

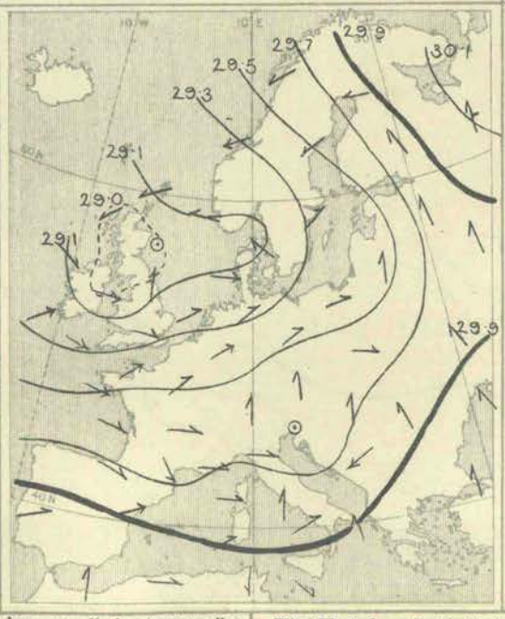
Barometer highest, 30·4 ins. and upwards in an anticyclone lying over central Russia, 30·2 ins. and upwards in the extreme south of Spain. Lowest, 29·2 ins. and less in a large but somewhat shallow depression lying over the north and north-west of our Islands. Depression subsequently becoming more clearly marked, secondary systems passing eastwards across many parts of western Europe, and barometer falling in most places.

Wednesday, 4th October.

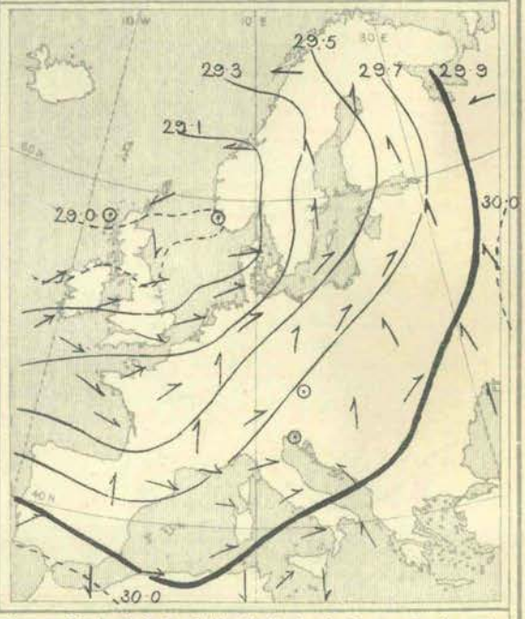
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning changeable and showery over the United Kingdom generally, but temporarily fine in the east of England. Dull over the greater part of the Continent, with rain in many parts of Denmark, Scandinavia, and north Germany, as well as in northern Italy, and at some of the southern French stations. Fine in the extreme southern parts of France and Italy. Rain falling during day in nearly all parts of Europe; thunderstorms occurring at Fanö, Belmullet, and Holyhead, and also in north Germany; lightning seen at night in the extreme south-east of England.

Temperature fallen in Ireland and Scotland, as well as in Scandinavia, Denmark, and Germany, risen in most other countries. Morning readings highest, 74° at Barcelona and Cagliari, 73° at Malta, 72° at Brindisi, Algiers, and Aumale; above 60° over southern Europe generally Lowest, (1) 35° at Nairn and 41° at Stornoway and Leith (below 45° over the northern parts of our Islands generally); (2) 42° at Cuxhaven and 45° at Münster; (3) 43° at Moscow and 44° at Haparanda. Remaining below 55° all day at most of our northern stations, but rising to between 55° and 60° in the south, and reaching 62° in London. Exceeding 65° in the south of France, and exceeding 70° in most parts of southern Europe.

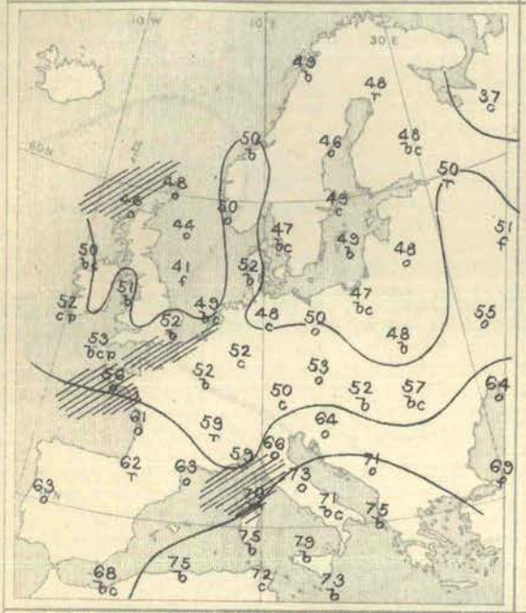
Wind Westerly or South-Westerly over England, Ireland, the Netherlands, France, Spain, and Italy, and strong in force on our own southern coasts. Moderate from the Southward in Germany, light from the South-Eastward in Austria and Russia; moderate to strong from the Eastward or North-Eastward in Scandinavia, as well as in the Shetlands and Hebrides. Variable, but chiefly Westerly, in Algeria. Subsequently increasing to a moderate or fresh gale from the Westward over the English Channel; no important change occurring elsewhere.

Barometer highest, 30·1 ins. and upwards in the extreme north of Russia; 30·0 ins. and upwards in the south of Russia, and also in Algeria and the south of Spain. Lowest, 29·0 ins. and less in a complex depression lying over Scotland and the north of Ireland, 29·1 ins. and less in a small secondary disturbance over the south of Norway. No important change occurring during day.

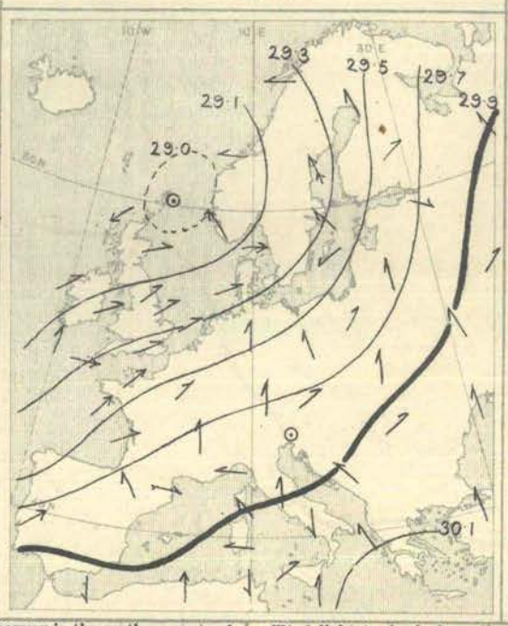
Judd & Co Ltd Lith. 63 Carter Lane

Thursday, 5th October.

Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.

Weather dull on our extreme north and north-west coasts, and showery in the southern parts of Ireland and England, but fine in all the more central parts of the United Kingdom. Dull over the Continent generally, with rain in the west and south of France, as well as at some of the northern stations in Sweden and Russia; fine and bright in the west of Norway, and also in Poland and the south of Italy. Showers falling during day in nearly all parts of our Islands, and considerable quantities of rain in France and the south of England. Lightning seen at several of our western stations and also at Spurn Head; thunder occurring at Scilly.

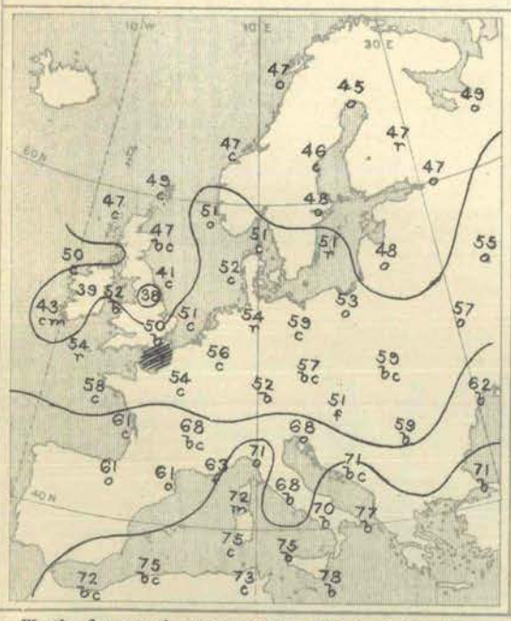
Temperature risen generally. Morning readings highest, 79° at Palermo, 76° at Barcelona, and 75° at Brindisi, Cagliari, and Algiers; above 60° in most parts of southern and south-eastern Europe. Lowest, (1) 37° at Archangel; (2) 39° at Ardrossan, 41° at Leith and Shields, and 43° at Parsonstown; below 50° in all but the extreme southern and south-western parts of the United Kingdom. Rising during day to 60° or a little more at several of our central and southern stations, to 65° and upwards over central France, to 70° and upwards over southern Europe generally, and to 80° and upwards in Italy.

Wind light to fresh from the South-Westward over England, Ireland, France, Spain, the Netherlands, and Denmark, Southerly or South-Easterly in Germany, Russia, and Sweden, with a gale at Hernösand; Easterly in the west of Norway; variable in the north of Scotland. Variable in Italy and Algeria. No important change occurring over western Europe during day.

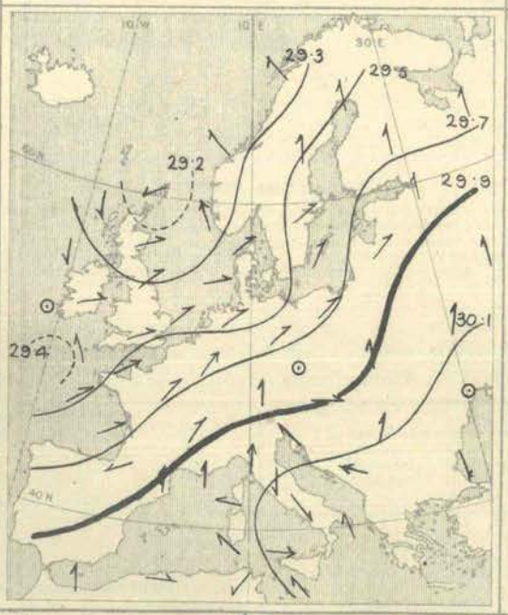
Barometer highest, 30·0 ins. and upwards in an area lying over the eastern parts of the Mediterranean, and extending northwards over Asia Minor and the Black Sea to central Russia. Lowest, 29·0 ins and less in a large shallow depression lying off the north and north-east of Scotland, as well as in another system off the north-west of Ireland. Shallow secondary disturbances moving north-eastwards during day across various parts of western Europe, and barometer, therefore, rather unsteady.

Friday, 6th October.

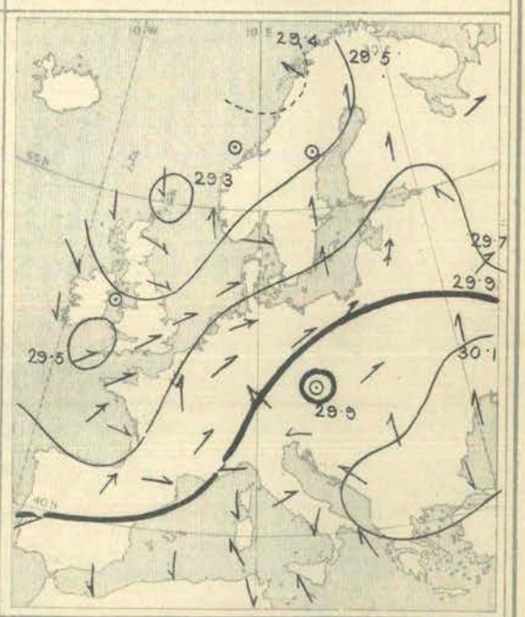
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fine over the greater part of our Islands, but showery in the south-west of England. Cloudy over a considerable portion of the Continent, with rain at some of the Swedish, Danish, German, and French stations; fine and bright in Italy, Austria, and south Germany. Showers falling during day in many parts of the United Kingdom, and considerable quantities of rain at our extreme southern stations, as well as over central France. Lightning seen at night on our south and south-west coasts and also at Biarritz.

Temperature risen in most places. Morning readings highest, 78° at Malta, 77° at Brindisi, and 75° at Cagliari, Palermo, Algiers, and Aumale; above 60° over southern Europe generally, and very little below it in Germany. Lowest, (1) 38° at York, 39° at Parsonstown, 41° at Shields, and 43° at Valencia (Ireland); (2) 45° at Haparanda and Uleaborg. Rising during day to 60° and more at several of our central and southern stations, and reaching 66° at Jersey. Exceeding 70° over the greater part of southern Europe and reaching 80° or more in a few places.

Wind light from the Northward or North-Westward on our extreme west and north-west coasts; South-Westerly over England, France, Germany, and Denmark, and fresh or strong in force at some of the Channel stations. Southerly or South-Easterly over Scandinavia, Russia, and the Baltic. Variable in Italy and Algeria. No important change occurring during day, but cyclonic circulation appearing over the extreme south-west of our Islands.

Barometer highest, 30·1 ins. and upwards over the whole of south-eastern Europe, with the south of Italy and the eastern parts of the Mediterranean. Lowest, 29·2 ins. and less in a shallow depression lying to the northward and north-eastward of Scotland; 29·4 ins. and less in a still shallower system near Scilly. Latter disturbance moving very slowly north-eastwards later, but barometer rising in most parts of western Europe.

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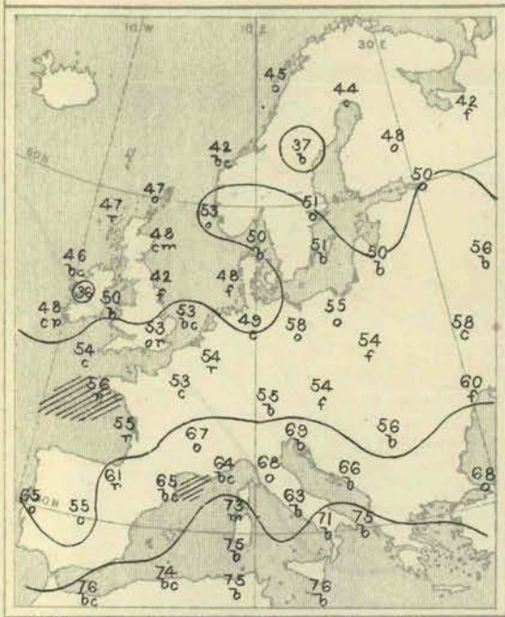
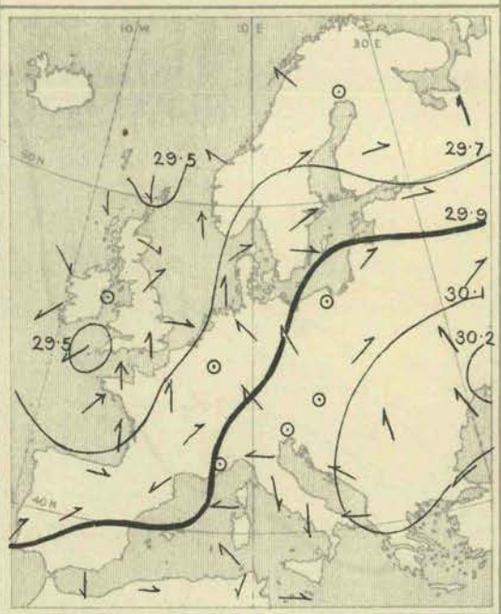
Saturday, 7th October.

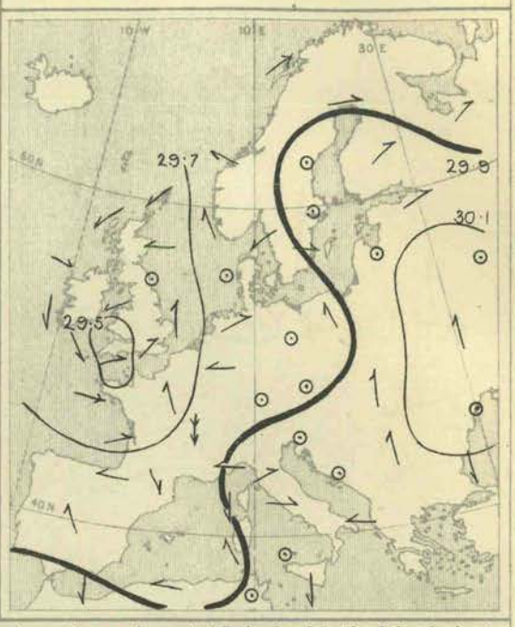
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather changeable and unsettled over the United Kingdom, with rain or passing showers in several places, and with fog over central Ireland and the north of England. Fine in Austria, Italy, Algeria, and the south of France; cloudy or overcast in other parts of the Continent, with rain in the south-west of France, as well as at Kharkov. Heavy rain falling later in several parts of the United Kingdom and France; thunder and lightning occurring over the south and east of England and also at Holyhead.

Temperature fallen in the west and north of our Islands, changed irregularly elsewhere. Morning readings highest, 76° at Malta and Sfax, 75° at Brindisi, Cagliari, and La Calle, and 74° at Algiers; above 60° over southern Europe generally, and very little below that point at some of the German stations. Lowest, (1) 36° at Parsonstown, 42° at Shields, and 43° at Nairn; (2) 37° at Hernösand, 42° at Archangel, and 43° at Uleaborg. Rising during day to between 60° and 65° over the central and southern parts of England, to 70° or more at several of the French and German stations, and to 80° or more over the central and southern parts of Italy, the highest reading of all being 88° at Palermo.

Wind light from the Northward over the greater part of Ireland and Scotland, Southerly at most of the English and French stations, as well as on the eastern shores of the North Sea, but Easterly or North-Easterly at the mouths of the English and Bristol Channels. South-Easterly in Germany and also in the west of Norway; South-Westerly over Sweden and the northern and central parts of Russia. Variable in Austria, Northerly or North-Easterly in Italy; South-Westerly in Spain. Light Easterly breezes setting in later over the northern parts of Great Britain; no important change occurring elsewhere.

Barometer highest, 30·2 ins. and upwards over the south of Russia. Lowest, 29·5 ins. and less in a small shallow depression lying off the north of Scotland, and also in another disturbance near the mouth of the Bristol Channel. Former depression subsequently disappearing; latter becoming more clearly defined and moving slowly eastwards.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force is indicated thus: ⟿ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze: and ⊙ = a calm. In the left-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Germany, Sweden, and Norway, and 7 a.m. in France, Algeria, Italy, Austria, and Russia; that for 6 p.m. is prepared from observations made at 6 p.m. in the British Islands and France, 7 p.m. in Algeria, 8 p.m. in Sweden and Norway, Germany, and Austria, and 9 p.m. in Russia, Belgium, and Italy. The time indicated in each case is the standard time for each country.

GENERAL NOTES.

This has been a week of changeable showery weather over the whole of our Islands and the Continent. Pressure has been high (relatively speaking) both over northern and south-western Europe, and a series of depressions has reached our Islands from the Atlantic, passed eastwards, and spread all over the central and some of the eastern countries. The amount of rainfall has been large—some of the showers very heavy, but local; thunder and lightning have occurred almost daily, especially at the stations on the shores of the English Channel, and temperature has been unsteady, as well as below its normal value in the British Isles.

At the close of the week there was no indication of settled weather in any of the north-western or western countries.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 236.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	39·1	?	50	?	EASTBOURNE	36·3	?	46	?
OSWALDKIRK (Yorkshire)	36·8	?	47	?	TENBY	36·6*	?	46*	?
WORKSOP	45·9	+24·9	58	+32	NEWQUAY	43·5	?	55	?
THURCASTON (Leicestershire)	36·8	+16·6	47	+21	TORQUAY	35·4*	?	45*	?
MARGATE	43·1	?	55	?	ARLEY COTTAGE (County Cavan)	35·3	?	45	?
WESTBOURNE (Sussex)	41·9*	?	53*	?	GUERNSEY	42·3*	?	53*	?
BRIGHTON	45·7	?	58	?					

* The values at Westbourne, Tenby, Torquay and Guernsey are obtained by Jordan's Photographic Recorder

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WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; R. H. SCOTT, F.R.S., SECRETARY.

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VOL. X. No. 41.] *Third Series.* WEEK ENDING SATURDAY, 14TH OCTOBER, 1893. [*Price 6d.* *Annual Subscription, post paid, £1 10s. 0d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871-90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the twenty-five years 1866-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the ten years 1881-90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

	DISTRICTS. (See p. 242.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 1st, 1893. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	57	36	51·0	41·6	46·2	1 below.	31	− 7	1	− 5	2234	+531	492	− 65
	1. SCOTLAND, EAST	61	31	53·2	39·5	46·2	1 below.	40	− 4	7	+ 1	2495	+323	569	− 14
	2. ENGLAND, N.E.	65	32	57·1	42·7	49·7	1 above.	54	+ 5	0	− 4	2732	+413	440	− 67
	3. ENGLAND, EAST	67	35	59·9	44·6	52·0	2 above.	70	+14	0	− 6	3191	+503	524	− 49
	4. MIDLAND COUNTIES	66	32	58·8	41·3	49·9	1 above.	57	+ 6	1	− 6	3275	+641	510	− 61
	5. ENGLAND, SOUTH	65	35	60·4	46·0	53·0	2 above.	77	+15	0	− 5	3481	+578	373	− 53
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	63	31	54·5	41·6	47·9	1 below.	43	− 6	1	− 3	2702	+473	360	− 66
	7. ENGLAND, N.W.	65	39	56·6	45·6	51·0	1 above.	63	+11	0	− 3	3128	+704	323	− 96
	8. ENGLAND, S.W.	65	32	58·4	44·1	51·1	0 (average)	64	+ 3	0	− 2	3384	+694	246	− 75
	9. IRELAND, NORTH	64	27	54·6	40·4	47·3	2 below.	44	− 6	4	+ 2	2922	+550	266	−100
	10. IRELAND, SOUTH	65	29	56·4	40·8	48·4	2 below.	50	− 8	3	0	3268	+595	184	− 98
	—CHANNEL ISLANDS	64	43	59·8	50·0	54·7	0 (average)	89	+ 9	0	0	3862	+839	70	− 52

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 242.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the mean for the Week.	From Jan. 1st, 1893. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 1st, 1893. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of ins.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	6	25	13 more.	188	+ 1	37·5	+ 1·2	11	− 7	15	− 9	944	−108	25	− 3
	1. SCOTLAND, EAST	4	10	3 more.	150	− 4	20·6	− 3·8	27	+11	37	+ 12	1254	+ 33	33	+ 1
	2. ENGLAND, N.E.	4	5	1 less.	128	−14	16·0	− 4·2	35	+17	46	+ 23	1409	+286	37	+ 7
	3. ENGLAND, EAST	6	12	6 more.	128	−11	15·3	− 4·7	29	+ 4	38	+ 5	1655	+295	44	+ 8
	4. MIDLAND COUNTIES	3	6	1 less.	123	−13	15·6	− 6·7	28	+ 6	37	+ 9	1568	+351	42	+ 9
	5. ENGLAND, SOUTH	5	14	7 more.	123	−10	17·7	− 3·3	27	+ 3	36	+ 2	1703	+378	46	+ 10
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	6	18	6 more.	152	−10	29·6	− 8·0	25	+ 5	34	+ 7	1410	+200	37	+ 5
	7. ENGLAND, N.W.	6	11	2 more.	142	− 6	23·8	− 2·7	27	+ 8	36	+ 10	1394	+194	37	+ 5
	8. ENGLAND, S.W.	5	12	2 more.	129	−23	24·9	− 5·4	22	− 4	28	− 4	1781	+347	48	+ 9
	9. IRELAND, NORTH	6	10	2 more.	163	−12	26·0	− 1·7	21	+ 2	27	+ 3	1223	+124	32	+ 3
	10. IRELAND, SOUTH	6	10	2 more.	143	−16	23·8	− 6·0	20	− 2	27	− 3	1272	+ 88	37	+ 3
	—CHANNEL ISLANDS	5	13	4 more.	136	−25	21·8	− 2·6	27	0	35	0	2086	+406	56	+ 11

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather continued in a very unsettled condition generally. Heavy rain fell in almost all districts, the amount in the south and south-east of England and in the north and west of Scotland being especially large. Thunder and lightning were experienced over our southern and south-eastern counties on the 9th.

Temperature was rather low during the greater part of the week, but rose rapidly at its close, so that the average values for the period did not differ very materially from the normals. The highest of the maxima were recorded on the 14th, when the thermometer rose to 67° in England E., 66° in the Midland Counties, and to between 64° and 65° in the other England districts and in Ireland. In Scotland, the maxima ranged from 57° in the north to 63° in the west. The lowest of the minima were registered on somewhat irregular dates, and varied from 27° to 29° in Ireland, from 31° to 36° in Scotland, and from 32° to 39° over England. In the Channel Islands the lowest reading was 43°.

Rainfall exceeded the mean in all districts excepting England N.E. and the Midland Counties. In the north and west of Scotland and south and east of England the fall was about twice as much as the normal amount.

Bright Sunshine was much less prevalent than during the preceding week, but still exceeded the mean generally. The percentage of the possible amount of duration ranged from 46 in England N.E., and between 34 and 38 in most other parts of Great Britain, to 27 in Ireland, and to 15 in Scotland N.

Barometer and Wind.—The distribution of pressure during this period changed frequently. Several depressions appeared over our Islands or their immediate neighbourhood, the most important being (1) a small subsidiary which moved northwards along the east coast of Scotland at the commencement of the week, causing an Easterly gale and heavy rain at the northern Scotch stations, and (2) a disturbance which advanced from the south-westward to our southern coasts on the 9th, producing very heavy rain at some of our south-eastern stations (including the metropolis). This depression apparently moved northwards to Scotland and became deeper, but in its rear a shallow secondary system moved eastwards along the Channel on the 11th, and occasioned further heavy falls of rain on our south coasts. At the end of the period, a depression was spreading across Scotland from the Atlantic, the weather being exceedingly mild and humid in all parts of our Islands.

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II.—DATA from which the SUMMARY on page 241 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°				Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	54	40	51·1	45·0	48·0	+ 1·6	42	0	5	2·21	+1·26	*	*	*	
	Stornoway	54	40	50·6	41·3	45·8	− 0·9	30	2	7	2·26	+1·16	13·6	− 7·1	19	− 9
	Wick	54	41	51·1	42·9	46·5	− 0·2	34	0	6	1·23	+0·56	*	*	*	*
	Lairg Ⓢ	55	39	49·6	40·6	45·0	− 1·5	27	4	6	1·91	+1·01	*	*	*	*
	Glencarron Ⓢ	57	37	50·4	39·6	44·8	− 1·2	30	7	7	3·90	+1·97	*	*	*	*
	Fort Augustus Ⓢ	57	36	52·6	40·3	46·3	− 0·9	37	5	6	2·11	+1·16	10·7	?	14	?
	Fort William Ⓢ	56	38	51·3	41·8	46·4	− 1·8	32	1	7	3·59	+1·82	? 9·9	?	?13	?
1. SCOTLAND, E.	Nairn	55	35	51·9	39·3	45·4	− 2·2	35	8	4	1·30	+0·74	*	*	*	*
	Aberdeen	56	37	53·9	41·6	47·6	− 0·3	41	1	4	1·14	+0·49	30·7	+ 9·3	41	+12
	Braemar Ⓢ	56	31	49·2	36·5	42·7	− 1·6	28	15	3	1·75	+0·86	26·8†	?†	36†	?†
	Ochtertyre Ⓢ	59	34	54·6	39·6	46·9	0·0	44	7	4	0·97	+0·04	*	*	*	*
	Leith	61	36	55·7	40·7	48·0	− 1·2	47	4	3	0·59	+0·16	*	*	*	*
	Marchmont Ⓢ	59	33	54·1	39·3	46·5	0·0	43	8	3	0·47	−0·25	26·3	?	35	?
2. ENGLAND, N.E.	Alnwick Castle	63	34	55·0	43·4	49·0	+ 1·0	49	0	4	0·30	−0·33	*	*	*	*
	Durham	65	32	57·7	41·2	49·2	+ 1·3	54	2	3	0·14	−0·53	37·1	+17·8	49	+23
	Shields	64	38	57·3	41·4	49·1	+ 0·3	52	2	3	0·35	−0·23	*	*	*	*
	Scarborough Ⓜ	62	39	57·5	42·0	49·5	− 0·2	53	0	4	0·59	−0·09	*	*	*	*
	York	63	35	58·3	41·3	49·6	+ 0·6	56	2	3	0·58	0·00	36·5	+17·4	49	+24
	Spurn Head	60	45	56·6	47·1	51·7	+ 0·8	68	0	4	0·92	+0·42	*	*	*	*
3. ENGLAND, E.	Hillington Ⓜ	64	40	59·2	44·5	51·6	+ 2·0	67	0	6	0·99	+0·40	26·7	+ 4·5	36	+ 7
	Yarmouth	64	43	59·1	47·3	53·0	+ 2·6	77	0	6	0·48	−0·17	*	*	*	*
	Geldeston	65	35	60·7	44·5	52·4	+ 2·0	73	0	5	0·70	+0·10	29·2	+ 2·8	39	+ 4
	Cambridge	67	36	61·1	42·9	51·7	+ 1·9	68	0	5	1·36	+0·85	27·5	+ 2·5	37	+ 4
	Rothamsted	63	36	59·5	43·6	51·3	+ 2·4	65	0	6	2·23	+1·56	30·4	?	41	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	65	33	58·7	40·9	49·5	+ 0·6	57	3	2	0·37	−0·28	*	*	*	*
	Loughborough	66	32	60·0	41·7	50·6	+ 1·1	61	1	3	0·36	−0·28	*	*	*	*
	Stamford (Ketton Hall)	66	35	60·4	43·0	51·4	+ 1·9	66	0	3	0·28	−0·36	*	*	*	*
	Cheadle Ⓜ	64	38	56·9	42·7	49·6	+ 1·9	53	0	3	0·87	+0·09	*	*	*	*
	Churchstoke Ⓜ	63	33	57·1	39·3	47·9	− 0·3	53	8	4	1·52	+0·76	24·6	+ 3·2	33	+ 4
	Hereford Ⓜ	65	33	59·1	40·8	49·7	+ 0·3	59	3	4	0·62	−0·32	*	*	*	*
	Cirencester	60	35	58·3	42·3	50·1	+ 1·6	57	0	4	0·56	−0·14	28·3	+ 6·1	38	+ 8
	Oxford	62	38	59·6	42·0	50·5	+ 0·7	60	0	4	0·29	−0·31	32·3	+ 8·8	43	+11
5. ENGLAND, S.	London	65	36	61·6	44·3	52·7	+ 1·9	75	0	5	2·14	+1·54	23·7†	+ 5·0†	32†	+ 7†
	North Foreland	65	43	60·1	49·9	54·9	+ 3·0	90	0	5	1·14	?	*	*	*	*
	Strathfield Turgiss Ⓜ	64	35	60·3	42·3	51·0	+ 1·2	63	0	7	1·05	+0·44	*	*	*	*
	Dungeness	64	39	60·3	49·1	54·5	+ 2·2	88	0	5	1·37	+0·65	*	*	*	*
	Hastings (St. Leonards)	63	41	60·4	48·5	54·3	+ 2·0	86	0	5	2·02	+1·22	28·3	− 0·7	37	− 2
	Southampton	64	36	61·2	45·4	53·1	+ 1·6	78	0	5	0·98	+0·23	28·2	+ 1·6	37	+ 2
	Hurst Castle	64	40	61·6	46·1	53·6	+ 1·2	81	0	5	1·08	+0·34	*	*	*	*
	Stowell Ⓜ	61	35	57·8	42·3	49·8	+ 0·3	55	0	6	1·23	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	59	37	54·4	42·9	48·5	+ 0·4	46	0	7	2·94	+1·16	*	*	*	*
	Glasgow	58	39	52·7	42·1	47·2	− 0·6	36	0	6	1·51	+0·68	22·0	+ 6·5	30	+ 9
	Ardrossan	59	42	55·0	44·6	49·7	+ 0·1	54	0	7	1·48	+0·59	*	*	*	*
	Glenlee Ⓢ	62	31	54·8	36·6	45·4	− 1·3	46	15	7	1·42	+0·14	*	*	*	*
	Douglas (Isle of Man)	63	36	55·8	41·8	48·6	− 0·8	47	1	4	1·47	+0·53	28·6	+ 4·8	38	+ 6
7. ENGLAND, N.W.	Stonyhurst	60	39	53·7	43·0	48·2	− 0·6	43	0	7	2·12	+0·93	20·7	+10·0	40	+14
	Blackpool Ⓜ	61	40	56·8	46·0	51·2	+ 1·5	64	0	6*	0·94	+0·01	25·3	+ 5·4	34	+ 7
	Manchester	63	39	57·2	45·6	50·2	+ 1·4	57	0	6	1·16	+0·26	18·9†	?	25†	?
	Liverpool Obsy. (Bidston)	65	43	57·4	46·6	51·8	+ 1·7	69	0	5	0·62	−0·19	*	*	*	*
	Llandudno Ⓜ	63	43	57·3	47·0	52·0	+ 0·5	70	0	5	0·86	+0·01	33·3	+15·5	44	+21
	Holyhead	62	44	57·3	47·6	52·3	+ 0·4	72	0	5	1·02	+0·08	*	*	*	*
8. ENGLAND, S.W.	Llandovery	62	34	? 59·1	?39·9	?49·2	?− 0·6	?59	?6	7	1·93	+0·73	*	*	*	*
	Pembroke	65	46	57·9	49·0	53·3	+ 1·2	79	0	4	1·19	+0·28	19·3	− 4·5	26	− 6
	Bristol (Montpelier)	63	37	59·1	42·9	50·8	+ 1·0	62	0	4	0·60	?	*	*	*	*
	Arlington (N. Devon)	60	37	56·7	42·4	49·3	− 0·8	51	0	5	1·87	+0·61	*	*	*	*
	Cullompton Ⓜ	61	32	59·4	39·4	49·1	− 1·2	61	7	5	0·87	−0·03	23·6	+ 1·6	31	+ 2
	Falmouth	60	43	57·8	48·0	52·8	+ 0·1	76	0	4	0·95	−0·28	19·2	− 7·2	25	−10
	Plymouth	63	36	58·6	44·4	51·3	− 0·9	65	0	6	1·09	+0·29	21·4	− 3·6	28	− 5
	Prawle Point	64	43	58·9	46·7	52·6	+ 0·2	74	0	6	1·17	+0·37	*	*	*	*
9. IRELAND, N.	Malin Head	58	40	53·0	45·1	48·9	+ 0·4	48	0	6	1·53	?	*	*	*	*
	Londonderry	61	33	55·2	40·8	47·8	− 1·1	46	3	7	1·14	+0·20	*	*	*	*
	Edenfel (Omagh)	61	31	52·7	38·0	45·1	− 2·6	39	11	7	1·12	+0·28	*	*	*	*
	Belmullet	58	41	54·4	45·0	49·5	− 2·2	53	0	7	0·65	?	*	*	*	*
	Markree Castle	64	27	55·5	37·6	46·3	− 2·2	49	12	7	0·64	−0·21	20·7	+ 1·0	28	+ 2
	Brookeborough	60	31	54·8	36·2	45·2	− 2·2	47	16	6	1·16	+0·25	*	*	*	*
	Armagh	62	30	54·1	39·3	46·5	− 1·6	43	8	5	0·81	+0·13	21·1	+ 2·4	28	+ 3
	Donaghadee	64	38	57·3	41·4	49·1	− 0·4	52	2	4	0·35	−0·35	*	*	*	*
	Edgeworthstown	?	31	?	37·1	?	?	?	?	4	1·61	−0·09	*	*	*	*
10. IRELAND, S.	Dublin	65	37	55·8	42·3	48·9	− 1·4	48	0	3	0·43	−0·23	21·5	− 2·1	29	− 2
	Parsonstown	62	29	57·4	35·0	45·9	− 2·8	57	20	6	1·11	+0·41	18·5	− 3·1	25	− 3
	Kilkenny	61	30	55·0	35·3	44·9	− 4·9	48	19	6	1·11	+0·44	*	*	*	*
	Waterford	61	31	56·5	36·9	46·4	− 5·2	52	14	6	0·85	−0·05	*	*	*	*
	Roche's Point	60	41	56·3	44·4	50·2	− 1·7	57	0	5	1·26	+0·36	*	*	*	*
	Valencia	61	35	56·9	42·6	49·5	− 2·9	53	0	6	1·56	+0·29	19·9	− 2·5	27	− 4
	Killarney	63	30	56·8	42·2	49·3	− 1·5	51	0	6	0·48	?	*	*	*	*
	Foynes	63	43	56·4	47·5	51·7	+ 2·6	68	0	6	0·92	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	61	48	57·9	49·9	53·8	− 0·3	83	0	5	0·90	+0·06	*	*	*	*
	Jersey	64	43	61·6	50·0	55·6	+ 0·9	95	0	5	1·61	+0·64	29·7	+ 0·1	39	+ 0

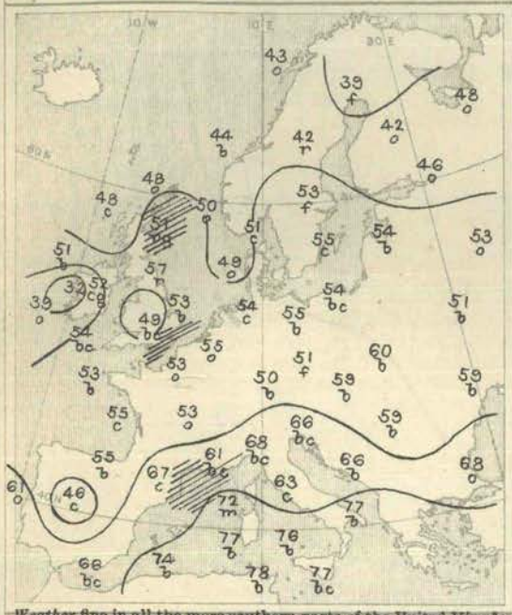
Stations marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

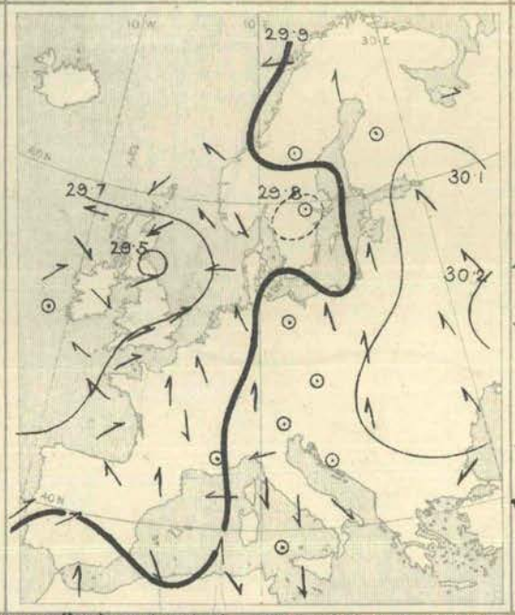
† The sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row) at the Kew Observatory, and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

Sunday, 8th October.

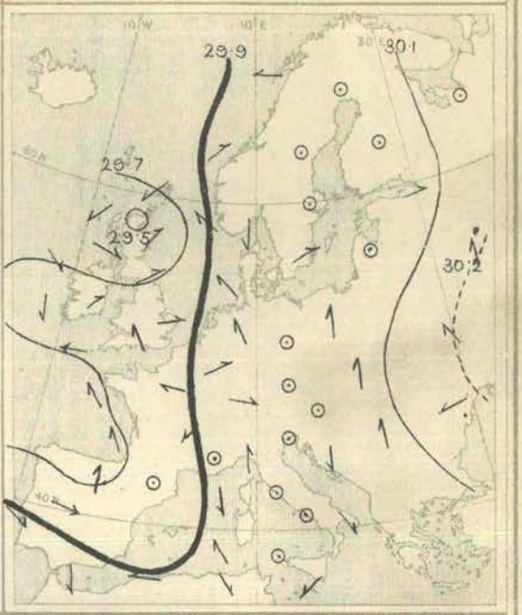
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fine in all the more southern parts of the United Kingdom, as well as in most parts of central, southern, and south-eastern Europe. Dull over the northern parts of our Islands and the Continent, and also over central France; rain falling on the north-east coasts of Great Britain, as well as at Hernösand and Helsingfors. Rain falling later in the west and north of our Islands generally, as well as in France and the extreme south of England, amounts large in the north of Scotland. Thunder and lightning occurring at Scilly and Prawle Point, and lightning seen at Jersey and Lyons.

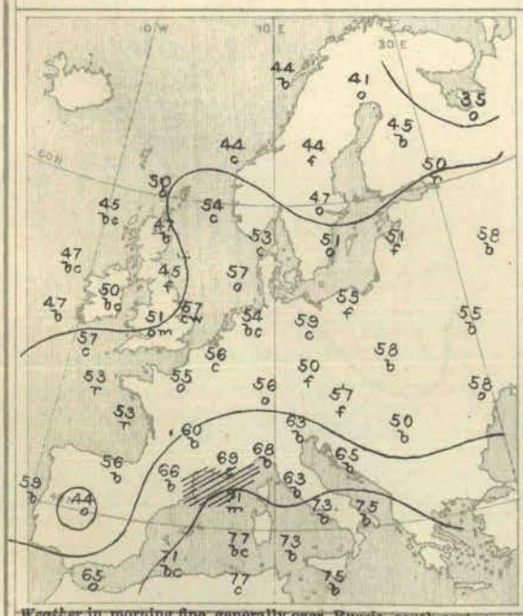
Temperature changed rather irregularly, but fallen in most places. Morning readings highest, 78° at Tunis, 77° at Brindisi, Cagliari, and Malta, and 76° at Palermo, above 60° in most parts of southern Europe, and above 55° in the south of Russia. Lowest, (1) 31° at Haparanda, 39° at Uleaborg, and 42° at Hernösand and Kuopio; (2) 32° at Parsonstown, and 41° at Nairn. Rising during day to between 60° and 65° over the central and southern parts of England; reaching 70° or more at several of the French and German stations, the highest reading of all being 79° at Perpignan.

Wind variable in the western parts of the United Kingdom, Southerly or South-Westerly in the east of England, South-Easterly over the eastern shores of the North Sea, Easterly or North-Easterly in Scotland, with a moderate gale at Aberdeen. Calm in Sweden, light from the South-Eastward over the greater part of Russia, variable in Germany and Austria; Northerly or North-Westerly in Italy. Light from the Southward or South-Westward in Spain, and from the East or South-East in the west of France. Subsequently increasing to a fresh to strong gale from the Eastward in the north of Scotland, but subsiding again towards evening.

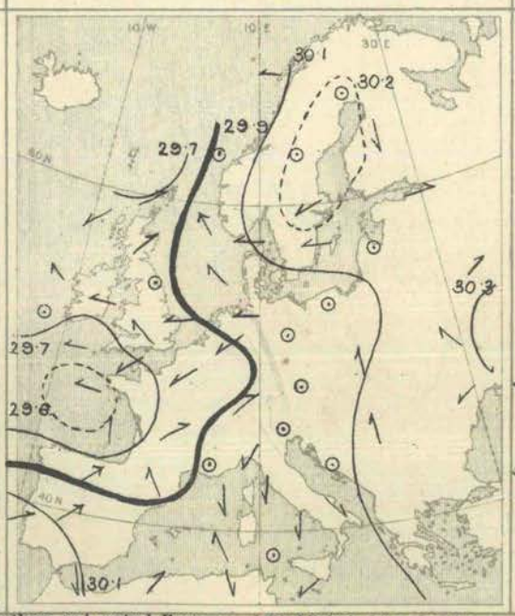
Barometer highest, 30·3 ins. and upwards in an anticyclone lying over the southern parts of Russia. Lowest, 29·5 ins. and less in a small depression off the Northumberland coast, 29·8 ins. and less in a very shallow system over the south of Sweden. Depression off our north-east coast subsequently moving northwards, new disturbance beginning to form over the Bay of Biscay.

Monday, 9th October.

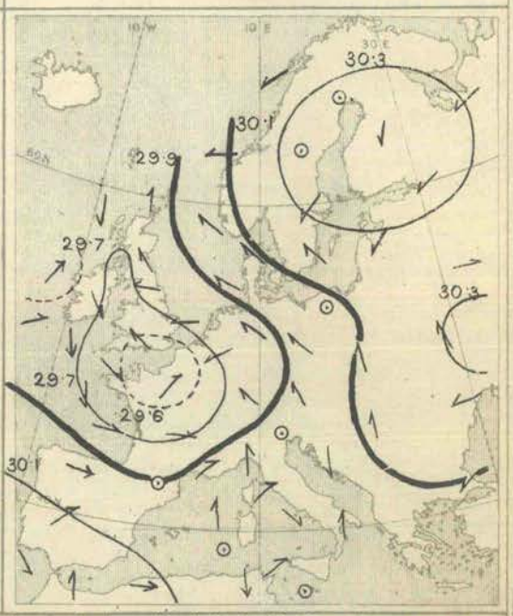
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine generally over Russia, south-eastern, southern, and central Europe; temporarily fine over the greater part of the United Kingdom, but changeable. Rainy over the north-east of Ireland and at Rochefort, foggy or hazy in many parts of England and in Austria. Heavy rain later in some parts of France and the south-east of England (1·2 ins. at Rochefort, 1·1 ins. in London, and 0·8 in. at Cambridge), and a considerable fall (0·5 in.) at Spurn Head. A large fall at Faerder also, and showers in most places; thunder and lightning over the southern half of England.

Temperature. Morning readings highest, 70° and more on the southern side of the Mediterranean, 60° or more over Italy, the southern parts of France and Austria and at Cracow, and 50° or more over the south of England, Germany, the southern half of Russia, and the Baltic Provinces. Lowest, 35° at Archangel, 36° at Uleaborg, 40° to 44° over the northern half of Scandinavia, 43° at Parsonstown, 45° at several of our northern stations. Rising to 60° or more at most of the English stations and at Fanö, exceeding 70° in the south of France, 79° at Perpignan.

Wind light in force almost everywhere and extremely variable in direction. Mainly Easterly over northern Europe and the Baltic, as well as over the southern half of England and the Channel; South-Westerly to Westerly over Spain, and blowing a fresh breeze at Lisbon and a moderate gale at Barcelona. Shifting to the North and North-West over the southern half of England later, and increasing from West at Biarritz.

Barometer highest, (1) 30·4 ins. to 30·1 ins. over Russia, and exceeding 30·2 ins. in a secondary anticyclone over Sweden; (2) 30·1 ins. and more to 30·0 ins. over Algeria and the southern half of Spain. Lowest, (1) 29·7 ins. and less over the Shetlands and neighbouring parts of the Atlantic, (2) 29·6 ins. and less in a depression over the Bay of Biscay. Latter system moving north-eastwards later, and a new one appearing off our north-western coasts. Rising slightly over northern Europe.

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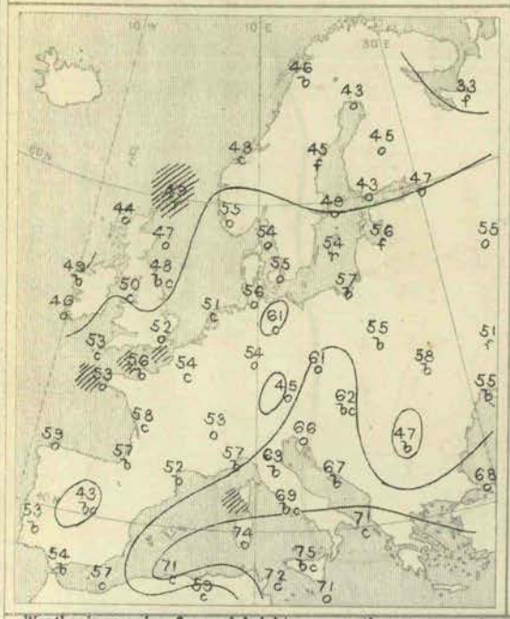
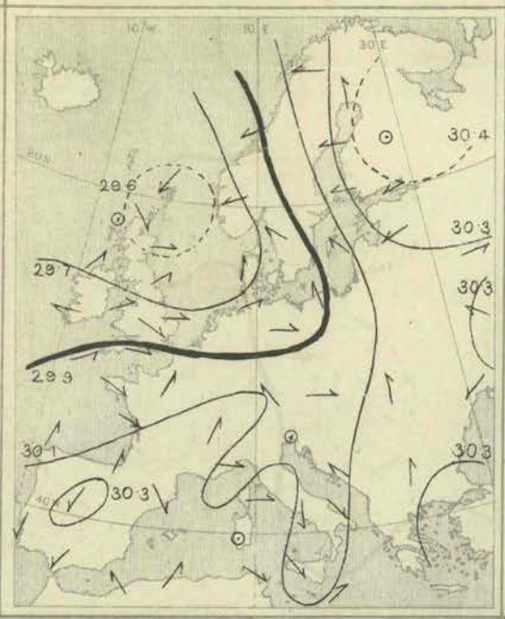
Tuesday, 10th October.

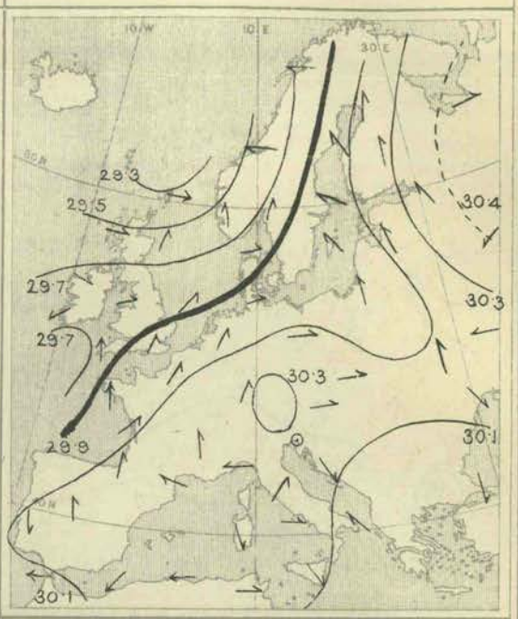
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over south-eastern, southern, and south-western Europe; for a time, clear and bright over the greater part of England and Scotland, but cloudy or overcast and changeable over the north-western and northern countries as a whole, with rain in the north-east of Scotland and at Wisby, showers at Pembroke. Rain falling later over almost all parts of our Islands, the north and north-west of France, and the eastern shores of the North Sea—but amounts large at our south-western stations only, considerable at York.

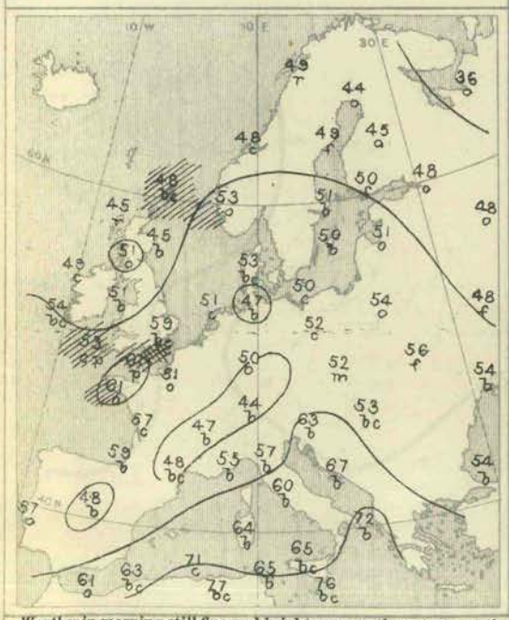
Temperature highest, 70° and more over the southern half of the Mediterranean, and above 60° on the eastern shores of the Mediterranean and Adriatic, and in several parts of Austria, exceeding 50° over the Baltic Provinces, Germany, France, and the south and east of England. Lowest, (1) 33° at Archangel, 42° at Uleaborg and also at Parsonstown, 43° at Hangö, 44° at Stornoway; (2) 41° at Kharkov. Touching 60° or 61° at a few of our south-western stations and in central France later, and exceeding 70° over the Riviera and at Biarritz.

Wind moderate; (1) Easterly over northern Europe and the Baltic, South-Easterly on the eastern side of the North Sea and over central Europe; (2) mainly Westerly over the British Islands and France (but Easterly at Valencia), variable over Spain and the Mediterranean. Backing Southwards over our southern districts and in the Channel later, and blowing a moderate gale at several stations.

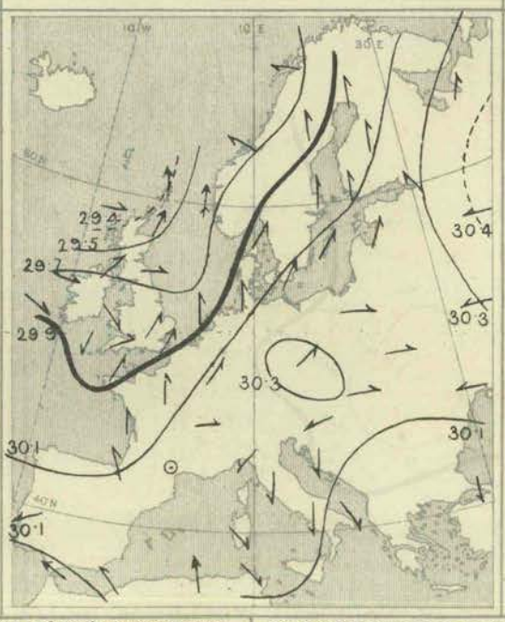
Barometer highest, (1) 30·4 ins. and more to 30·0 ins. over northern Europe, and exceeding 30·3 ins. in the south of Russia; (2) 30·3 ins. and more to 30·0 ins. over Spain, France, and the Mediterranean. Lowest, 29·6 ins. and less to 29·7 ins. over the Shetlands and North Sea. Rising over the North Sea later, but falling on our south-western coasts and in the Shetlands, as fresh disturbances advanced over those regions.

Wednesday, 11th October.

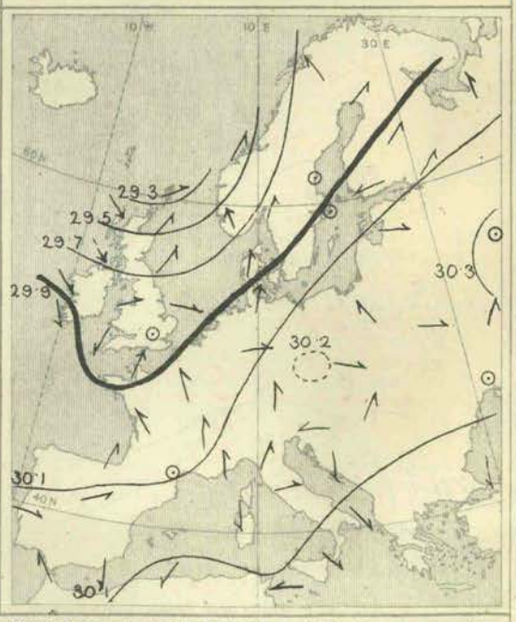
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning still fine and bright over south-eastern, southern, and south-western Europe, and temporarily clear in many parts of the United Kingdom and the southern parts of Scandinavia; cloudy elsewhere, rainy at Bodö, Stornoway, Malin Head, and over the western parts of the English Channel, foggy over the Gulf of Bothnia. Rain later at the Norwegian, Scotch, and Irish stations, and heavy falls over the south of England, the Channel, north of France, and Belgium—more than an inch in several places.

Temperature risen greatly over England, the Gulf of Finland, and also over Spain and Algeria. Morning readings exceding 70° at many stations on the southern side of the Mediterranean, exceeding 60° over Italy and the Adriatic, and touching 60° even at Hurst Castle and Dungeness. Below 50° over the northern countries, and, lowest of all, (1) 36° at Archangel, 44° at Haparanda, 45° at Stornoway and Aberdeen; (2) 41° at Kharkov, 48° at Kiev. Exceeding 60° over our southern stations and France later, exceeding 70° at Biarritz and Perpignan, and exceeding 50° over north-western Europe generally. Falling over our Islands still later.

Wind mainly Westerly to South-Westerly over the United Kingdom and blowing very strongly in the eastern parts of the Channel, South-Westerly to Southerly over the North Sea, the Baltic, and Finland, South-Easterly in the north-west of Norway. Very variable and light over southern Europe and the Mediterranean, Easterly over the south of Spain, and South-Easterly over Algeria. Small cyclonic circulation over mouth of Channel in morning—moving eastwards during day. Wind becoming strong from North-West over the north of Scotland.

Barometer highest, 30·4 ins. and more to 30·2 ins. over central and western Russia, ranging between 30·3 ins. and 30·1 ins. over central and southern Europe and the Mediterranean. Lowest, 29·4 ins. and less over the north of Scotland and the Shetlands, about 29·7 ins. in a shallow secondary over the North Sea, and about 29·8 ins. in another very small system at the mouth of the English Channel. Both the northern and the southern systems moving eastwards later—that in the north becoming deeper.

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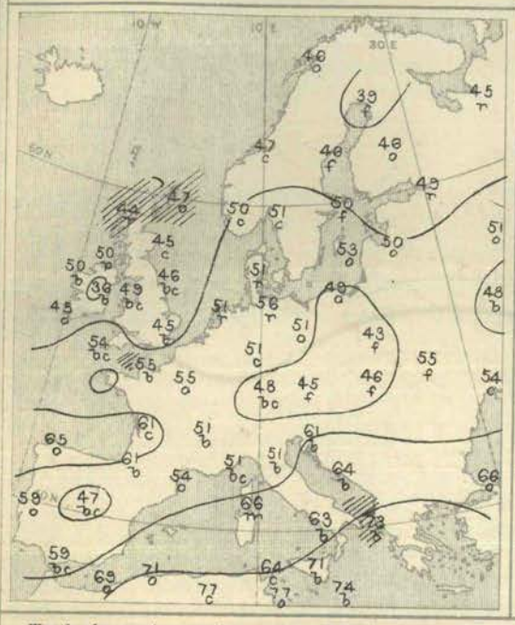
Thursday, 12th October.

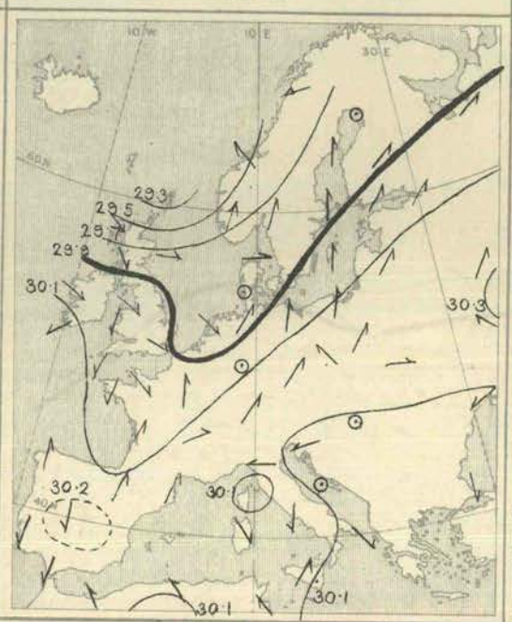
Temperature and Weather.

8 a.m.

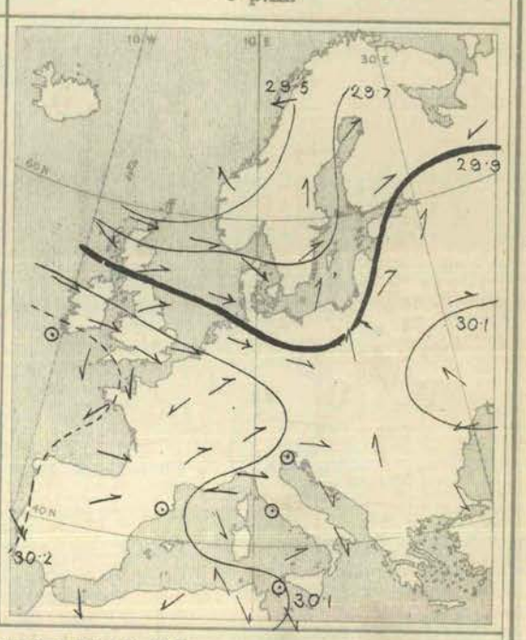


Barometer and Wind.

8 a.m.



6 p.m.



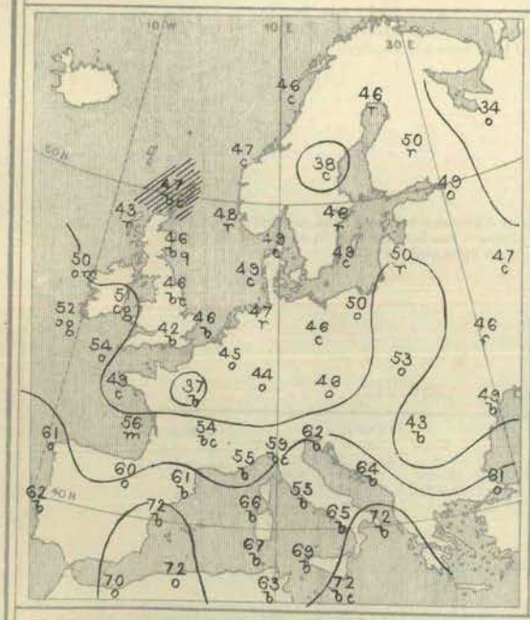
Weather in morning varying greatly in different localities—fine and bright over south-eastern, southern, and south-western Europe, dull and unsettled over the Baltic and northern Europe, with rain at Archangel and St. Petersburg; dull and very rainy over the Netherlands and the north and north-east of France, fine over England and Ireland, squally and rainy over Scotland. Considerable rainfall over Scandinavia later, and smaller quantities in Denmark, Germany, the Netherlands, and north and west of Scotland; fine over England and Ireland.
Temperature fallen greatly over England, risen a little over southern Europe. Morning readings still exceeding 70° at many of the extreme southern stations, but below 60° over by far the greater part of Europe, above 50°, however, except over the northern countries and the British Islands. Lowest, 39° at Haparanda, and 45° to 49° over Finland and the northern half of Scandinavia; 44° to 47° over Scotland and our Midland Counties. Touching 60° or more later over the south of England and in France and Germany, and reaching 71° at Lyons and Perpignan, and 77° at Biarritz.

Wind (1) strong to a moderate gale from West-North-West and West over the north of Scotland, and from South-South-West at Skudesnaes, moderate Southerly over the Baltic, light from South-East and East over the northern parts of Norway; North-Westerly to Northerly over England and the Channel, South-Westerly to Southerly over central France and the Netherlands; very variable over south-western, southern, and south-eastern Europe. Moderating in Scotland later, and showing a tendency to back towards South-West in the west of Ireland.
Barometer highest, (1) 30·3 ins. and more over Russia, (2) 30·2 ins. and more over the Iberian Peninsula, and exceeding 30·1 ins. over southern Europe generally. Lowest, 29·3 ins. and less in a depression over the Shetlands and 29·9 ins. and less over Belgium. Rising fast over the Shetlands later, and briskly over the North Sea and east of our Islands, but inclined to fall again in the west of Ireland.

Friday, 13th October.

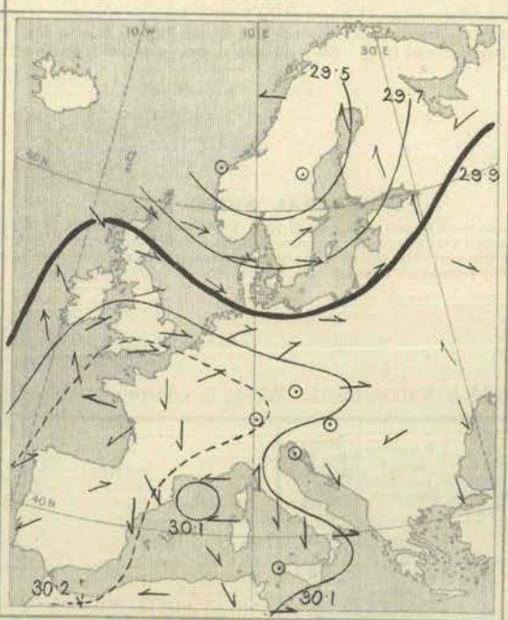
Temperature and Weather.

8 a.m.

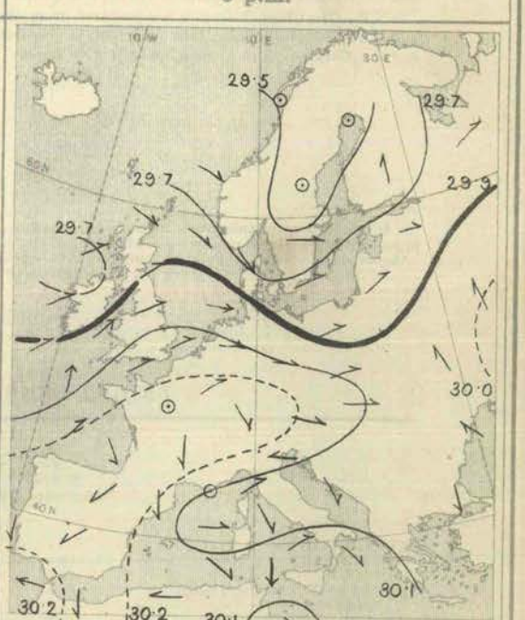


Barometer and Wind.

8 a.m.



6 p.m.



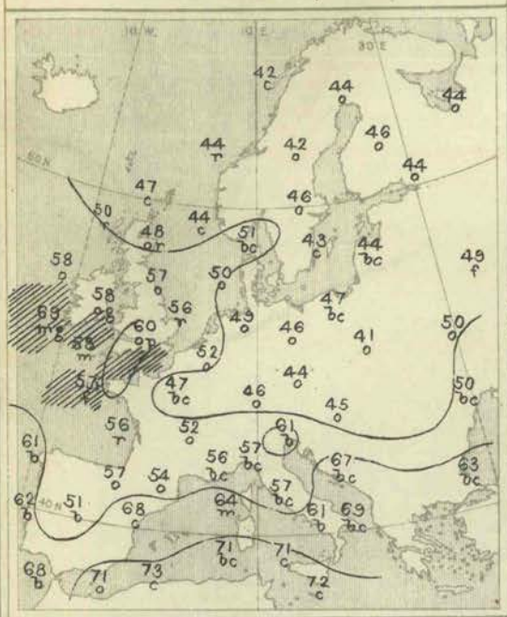
Weather in morning continuing fine and bright over south-eastern, southern, and south-western Europe, and temporarily clear and bright over the greater part of France and England; cloudy or overcast elsewhere, rainy over Finland, the south-west of Norway, the Hebrides, and some parts of Ireland. Rain spreading over the whole of our Islands later from the westward, and some local falls occurring on the Continent; amounts large at Ardrossan, and considerable at Valencia, Loughborough, Christiansund, and Haparanda.
Temperature fallen fast over England and France, risen in Ireland. Morning readings exceeding 70° at a few extreme southern stations, and exceeding 60° on most of the Mediterranean shores; exceeding 50° in the extreme west and south-west of the British Islands, over Austria, Poland, and the Baltic Provinces. Lowest, (1) 34° at Archangel, 38° at Hernösand; (2) 39° at Kharkov, 46° at Kiev; (3) 37° at Paris, 41° at Le Mans and Oxford, 42° at London. Rising decidedly over England and France later; touching 58° in London in the afternoon, exceeding 60° over the south of France, and touching 76° at Perpignan, and 90° at Laghouat.

Wind still light and very variable over the southern and eastern countries; moderate to strong in force and cyclonic in direction in the north, viz.:—(1) North-Westerly in Scotland, Westerly over the North Sea, Baltic, and north Germany, Southerly over Finland, South-Easterly to Easterly over Lapland; (2) South-Westerly over the Irish Sea, Southerly to South-Easterly (fresh and increasing) over Ireland. Blowing strongly from the Southward on our western coasts later, and backing towards that quarter over the Kingdom generally, the English Channel, and north of France; veering to North-West in Norway.
Barometer highest, 30·2 ins. and more to 30·0 ins. over France, Germany, England, and Ireland, and 30·1 ins. to 29·9 ins. over Russia. Lowest, 29·5 ins. and less in a large depression over the northern half of Scandinavia, and below 30·0 ins. off the west of Ireland. Falling fast at the Irish stations later, and fall spreading eastwards and southwards, as a new depression approached Ireland from the westward.

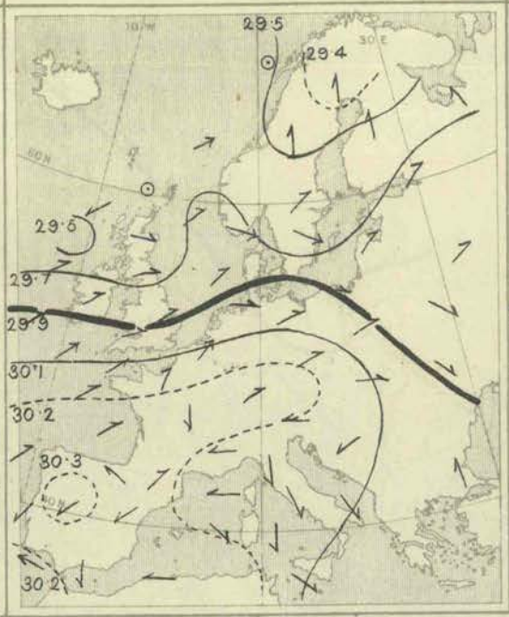
Judd & Co. Ltd.

Saturday, 14th October.

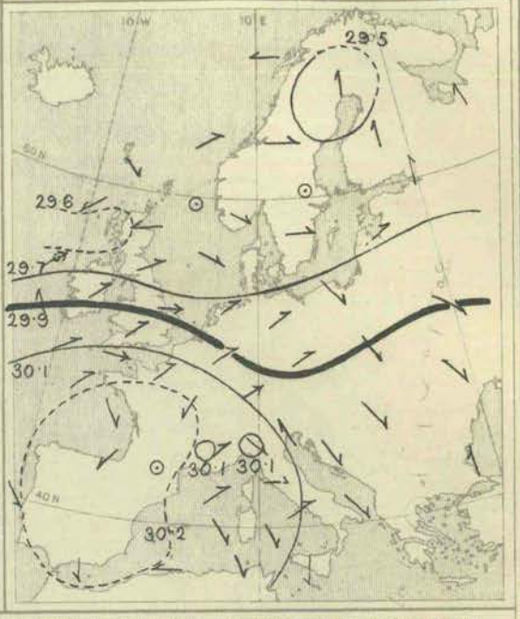
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning still fine over Spain, the Mediterranean, and a great deal of south-eastern Europe, but dull in almost all other places, and very rainy over the United Kingdom and north of France, as well as in some parts of the more northern countries. Rain later over the whole of our Islands and neighbouring regions, as well as over northern Europe and north Germany, but amounts not large anywhere.

Temperature risen rapidly over Ireland, England, and France; air close and "muggy." Morning readings highest, 70° in Algeria and Malta, 60° or more at most of the Mediterranean stations and in several parts of England, and exceeding 50° except over the northern countries. Lowest, 42° at Bodö and Hernösand, 44° at Haparanda, Archangel, and St. Petersburg, and 46° to 49° in the north-east of Scotland. Rising to between 64° and 67° in many parts of England later, and touching 68° at Rochefort, and Nice, 70° and more over Italy, 79° at Perpignan and Malta, and 95° at Laghouat. Succeeding night very warm over Ireland and England.

Wind still light and variable over the southern and eastern countries, fresh to moderate gale from West or South-West over Ireland, England, the Netherlands, and Baltic; light and variable in Scotland and over the north of Scandinavia. The South-Westerly wind moderating a little on our southern coasts later, but Easterly breezes becoming established over the northern parts of Scotland and Norway.

Barometer highest, 30·3 ins. and more to 29·9 ins. in an anticyclone stretching from Spain across France and Germany to western Russia. Lowest, 29·4 ins. and less at the northern extremity of the Gulf of Bothnia, and about 29·6 ins. to 29·5 ins. in a depression over Scotland and the neighbouring parts of the Atlantic. Latter disturbance showing some tendency to fill up later.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force is indicated thus: ⇛ = a heavy gale; ➤ = a gale; → = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the left-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Germany, Sweden, and Norway, and 7 a.m. in France, Algeria, Italy, Austria, and Russia; that for 6 p.m. is prepared from observations made at 6 p.m. in the British Islands and France, 7 p.m. in Algeria, 8 p.m. in Sweden and Norway, Germany, and Austria, and 9 p.m. in Russia, Belgium, and Italy. The time indicated in each case is the standard time for each country.

GENERAL NOTES.

In the course of this week a number of disturbances have passed over the British Isles and the northern countries of Europe, while, over the southern countries, pressure has been uniform and somewhat high. The rainfall over the former districts has, therefore, been large—in many places it has been greatly in excess of the mean—the winds have been cyclonic and pressure low—but in the south the weather has been fair and quiet and the winds have been light and variable.

At the close of the week there was no indication of any permanent change.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 242.

Stations.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	Stations.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	25·4	?	34	?	EASTBOURNE	27·4	?	36	?
OSWALDKIRK (Yorkshire)	30·9	?	41	?	TENBY	23·4*	?	31*	?
WORKSOP	24·3	+ 4·6	32	+ 6	NEWQUAY	19·1	?	25	?
THURCASTON (Leicestershire)	28·8	+ 9·4	38	+12	TORQUAY	24·2*	?	32*	?
MARGATE	24·1	?	32	?	ARLEY COTTAGE (County Cavan)	19·8	?	26	?
WESTBOURNE (Sussex)	26·3*	?	35*	?	GUERNSEY	23·3*	?	31*	?
BRIGHTON	31·9	?	42	?					

* The values at Westbourne, Tenby, Torquay and Guernsey are obtained by Jordan's Photographic Recorder.

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WEEKLY WEATHER REPORT.

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VOL. X. No. 42.] *Third Series.* WEEK ENDING SATURDAY, 21ST OCTOBER, 1893. [*Price 6d.* *Annual Subscription, post paid, £1 10s. 0d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871-90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the twenty-five years 1866-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the ten years 1881-90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

	DISTRICTS. (See p. 248.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 1st, 1893. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	° 60	° 37	° 55·6	° 45·6	° 50·5	° 5 above.	Day-deg. 60	Day-deg. +27	Day-deg. 0	Day-deg. − 7	Day-deg. 2294	Day-deg. +557	Day-deg. 492	Day-deg. − 67
	1. SCOTLAND, EAST	66	35	59·2	45·8	52·3	7 above.	72	+34	0	− 8	2567	+357	569	− 17
	2. ENGLAND, N.E.	67	37	60·1	47·4	53·6	6 above.	81	+39	0	− 5	2813	+452	440	− 68
	3. ENGLAND, EAST	68	38	61·1	48·8	54·8	7 above.	90	+42	0	− 8	3281	+546	524	− 55
	4. MIDLAND COUNTIES	69	35	60·9	47·1	53·8	7 above.	83	+38	0	− 9	3358	+680	510	− 68
	5. ENGLAND, SOUTH	66	35	61·0	49·9	55·3	6 above.	92	+37	0	− 6	3573	+615	373	− 56
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	61	34	57·5	48·3	52·8	6 above.	76	+34	0	− 6	2778	+505	360	− 67
	7. ENGLAND, N.W.	70	40	58·7	51·0	54·7	6 above.	89	+43	0	− 4	3216*	+747	323	− 96
	8. ENGLAND, S.W.	66	31	60·4	50·4	55·2	5 above.	92	+37	0	− 2	3476	+730	246	− 76
	9. IRELAND, NORTH	63	31	58·1	48·3	53·2	6 above.	78	+33	0	− 4	3000	+581	266	−101
	10. IRELAND, SOUTH	68	34	59·5	49·6	54·4	5 above.	87	+35	0	− 3	3355	+627	184	− 99
	—CHANNEL ISLANDS	65	45	61·9	43·4	57·6	5 above.	109	+38	0	0	3971	+875	70	− 52

Rainfall.

	DISTRICTS. (See p. 248.)	For the Week. Number of Rainy Days.	Total Fall.	More or less than the mean for the Week.	From Jan. 1st, 1893. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	7	10ths of in. 14	10ths of ins. 2 more.	195	+ 3	Ins. 38·9	Ins. + 1·4
	1. SCOTLAND, EAST	3	3	4 less.	153	− 5	20·9	− 4·2
	2. ENGLAND, N.E.	2	1	5 less.	130	−16	16·1	− 4·7
	3. ENGLAND, EAST	2	5	1 less.	130	−12	15·8	− 4·8
	4. MIDLAND COUNTIES	2	5	2 less.	125	−15	16·1	− 6·9
	5. ENGLAND, SOUTH	3	7	0 (average)	126	−10	18·4	− 3·3
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	4	7	5 less.	156	− 9	30·3	− 8·4
	7. ENGLAND, N.W.	2	5	5 less.	144	− 8	24·3	− 3·2
	8. ENGLAND, S.W.	4	9	1 less.	133	−24	25·8	− 5·5
	9. IRELAND, NORTH	4	4	4 less.	167	−13	26·4	− 2·1
	10. IRELAND, SOUTH	4	10	1 more.	147	−16	24·8	− 5·9
	—CHANNEL ISLANDS	4	1	8 less.	140	−26	21·9	− 3·4

Bright Sunshine.

	DISTRICTS. (See p. 248.)	For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 1st, 1893. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	6	−11	8	− 15	950	−118	24	− 3
	1. SCOTLAND, EAST	15	− 5	22	− 10	1269	+ 32	33	+ 1
	2. ENGLAND, N.E.	17	+ 1	23	+ 1	1426	+285	37	+ 7
	3. ENGLAND, EAST	21	− 2	29	− 5	1676	+292	44	+ 8
	4. MIDLAND COUNTIES	18	− 2	25	− 3	1586	+546	41	+ 8
	5. ENGLAND, SOUTH	22	− 1	30	− 4	1725	+377	45	+ 10
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	12	− 6	18	− 8	1422	+197	37	+ 5
	7. ENGLAND, N.W.	5	−12	7	− 17	1399	+184	36	+ 5
	8. ENGLAND, S.W.	22	− 0	29	0	1803	+346	47	+ 9
	9. IRELAND, NORTH	11	− 5	15	− 6	1234	+119	32	+ 3
	10. IRELAND, SOUTH	10	−12	15	− 15	1382	+ 80	36	+ 2
	—CHANNEL ISLANDS	33	+ 9	46	+ 14	2119	+410	56	+ 11

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather during this period varied considerably. In the extreme west and north small amounts of rain fell almost daily, but in the more southern and eastern districts rain fell only on the first few days, and again at the end of the week, the intervening days being fine and bright.

Temperature was much above the mean, the excess ranging from 5° in Scotland N. on the one hand, and England S.W., Ireland S., and the Channel Islands on the other, to 7° in Scotland E., England E., and the Midland Counties. The highest of the maxima were recorded, as a rule, either on the 16th or 21st, when they varied from 70° in England N.W., and from between 66° and 69° in most of the other districts, to 61° in Scotland W., and 63° in Scotland N. The lowest of the minima were recorded on the 19th, and ranged from 31° over England S.W. and Ireland N., to 40° in England N.W., and to 45° in the Channel Islands. During the earlier half of the week the nightly minima were very high for the time of year.

Rainfall slightly exceeded the mean in Scotland N. and Ireland S., and just equalled it in England S.; in all other districts there was a deficit. In England N.E. and also in the Channel Islands the aggregate fall amounted to only one-tenth of an inch.

Bright Sunshine was (excepting in the Channel Islands) less prevalent than of late, the percentage of the possible duration ranging from 7 in England N.W. and 8 in Scotland N., to 15 in the Irish districts, to 29 in England E. and England S.W., and to 30 in England S. In the Channel Islands, however, the percentage was as high as 46.

Barometer and Wind.—During the whole of this period large depressions moved north-eastwards outside our north-western and northern coasts, and during the first few days the systems spread out considerably over our Islands. In addition to these disturbances, a small depression moved south-eastwards over our south-western and southern districts during the 17th, and caused heavy falls of rain at some of our southern and south-eastern stations. As this system passed off, the conditions over England became anticyclonic, but at the end of the period the high-pressure was moving away south-eastwards. South-Westerly to Westerly winds of no great strength prevailed generally over the United Kingdom, but on the 18th they shifted to the northward in the south and south-west, and on the day following, light variable or Easterly winds were experienced in those localities.

* This value has been altered owing to the receipt of further information for a preceding week.

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II.—DATA from which the SUMMARY on page 247 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°				Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	55	38	52·6	43·4	47·9	+2·8	41	0	7	1·36	+0·39	*	*	*	*
	Stornoway	57	42	55·3	46·1	50·6	+5·3	60	0	7	1·38	+0·23	9·3	−10·6	13	−15
	Wick	60	39	56·1	46·1	51·0	+5·3	63	0	6	0·95	+0·25	*	*	*	*
	Lairg Ꞩ	59	40	56·1	44·4	50·1	+5·2	57	0	7	0·33	−0·09	*	*	*	*
	Glencarron Ꞩ	59	39	55·0	44·6	49·7	+5·0	54	0	7	2·64	+0·62	*	*	*	*
	Fort Augustus Ꞩ	60	37	57·9	47·4	52·5	+6·9	74	0	6	0·91	−0·01	6·3	?	9	?
	Fort William Ꞩ	58	39	56·2	47·2	51·6	+4·8	67	0	6	1·75	−0·06	1·6	?	2	?
1. SCOTLAND, E.	Nairn	62	39	59·3	45·3	52·1	+6·2	71	0	6	0·77	+0·24	*	*	*	*
	Aberdeen	64	42	58·7	46·7	52·5	+5·9	74	0	4	0·57	−0·09	13·2	−7·0	19	−10
	Braemar Ꞩ	60	37	55·6	43·5	49·4	+6·6	52	0	3	0·19	−0·71	11·7†	?†	17†	?†
	Ochtertyre Ꞩ	63	35	60·7	44·6	52·4	+7·1	73	0	2	0·03	−0·95	*	*	*	*
	Leith	64	41	61·1	48·6	54·7	+7·1	89	0	2	0·02	−0·42	*	*	*	*
	Marchmont Ꞩ	66	39	60·0	46·0	52·8	+8·0	76	0	3	0·19	−0·56	15·5	?	22	?
2. ENGLAND, N.E.	Alnwick Castle	62	41	58·6	46·9	52·6	+5·9	74	0	3	0·18	−0·47	*	*	*	*
	Durham	66	38	61·2	47·7	54·3	+7·7	86	0	2	0·02	−0·65	22·9	+4·4	32	+6
	Shields	65	42	60·7	47·7	54·0	+6·7	84	0	3	0·20	−0·35	*	*	*	*
	Scarborough Ꞩ	65	40	60·1	43·1	51·4	+3·1	66	0	2	0·08	−0·62	*	*	*	*
	York	67	37	61·1	47·9	54·3	+7·0	86	0	2	0·09	−0·51	15·5	−2·3	22	−3
	Spurn Head	63	46	59·1	50·9	54·9	+5·8	90	0	1	0·01	−0·50	*	*	*	*
3. ENGLAND, E.	Hillington Ꞩ	66	39	60·4	49·3	54·7	+6·9	89	0	2	0·28	−0·32	17·2	−3·4	24	−5
	Yarmouth	65	43	60·6	49·9	55·1	+6·2	92	0	2	0·34	−0·32	*	*	*	*
	Geldeston	66	38	61·6	49·1	55·2	+6·4	92	0	2	0·51	−0·03	14·7	−9·8	20	−13
	Cambridge	68	41	62·9	48·3	55·4	+7·5	94	0	2	0·80	+0·28	26·3	+3·2	37	+4
	Rothamsted	65	39	59·8	47·5	53·5	+6·4	81	0	3	0·58	−0·07	26·3	?	36	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	69	35	61·7	45·4	53·3	+6·0	79	0	0	—	−0·62	*	*	*	*
	Loughborough	68	37	61·6	46·7	53·5	+6·3	83	0	2	0·38	−0·24	*	*	*	*
	Stamford (Ketton Hall)	67	41	61·4	48·6	54·8	+7·2	90	0	2	0·50	−0·14	*	*	*	*
	Cheadle 𝔐	65	40	58·1	47·0	52·4	+6·4	73	0	2	0·17	−0·63	*	*	*	*
	Churchstoke 𝔐	69	35	60·6	46·6	53·4	+6·7	80	0	4	0·83	+0·05	17·2	−2·5	24	−3
	Hereford 𝔐	68	35	61·7	47·4	54·3	+6·6	86	0	4	0·38	−0·24	*	*	*	*
	Cirencester	65	37	60·1	47·1	53·4	+6·6	80	0	3	0·60	−0·08	25·9	+4·0	36	+6
	Oxford	68	38	61·9	48·3	54·9	+6·7	90	0	2	0·71	+0·16	26·6	+4·1	37	+6
5. ENGLAND, S.	London	66	39	61·3	49·3	55·1	+6·1	92	0	3	0·84	+0·26	19·2†	+2·3†	27†	+3†
	North Foreland	65	46	61·0	51·9	56·3	+6·5	100	0	2	0·40	?	*	*	*	*
	Strathfield Turgiss 𝔐	64	35	60·4	47·6	53·8	+5·8	83	0	5	0·66	+0·07	*	*	*	*
	Dungeness	64	39	61·0	49·7	55·2	+4·5	92	0	3	0·41	−0·32	*	*	*	*
	Hastings (St. Leonards)	63	45	60·1	50·9	55·4	+4·7	94	0	2	0·51	−0·30	16·6	−10·2	23	−14
	Southampton	66	39	62·8	49·9	56·2	+6·4	99	0	3	0·55	−0·16	23·3	−1·5	32	−2
	Hurst Castle	65	43	61·6	51·7	56·5	+5·7	102	0	2	1·60	+0·86	*	*	*	*
	Stowell 𝔐	65	36	60·1	48·3	54·0	+6·2	84	0	3	0·34	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	61	41	58·7	47·7	53·0	+6·3	77	0	6	1·99	+0·21	*	*	*	*
	Glasgow	60	38	57·1	47·8	52·3	+5·8	72	0	2	0·09	−0·76	11·9	−1·7	17	−3
	Ardrossan	58	39	56·4	49·6	52·9	+4·8	76	0	6	0·13	−0·74	*	*	*	*
	Glenlee Ꞩ	61	34	57·6	47·4	52·4	+6·8	73	0	4	0·62	−0·63	*	*	*	*
	Douglas (Isle of Man)	61	42	57·7	48·9	53·2	+5·3	78	0	2	0·44	−0·51	12·7	−9·2	18	−13
7. ENGLAND, N.W.	Stonyhurst	60	40	56·6	48·2	52·3	+5·2	72	0	3	0·91	−0·23	4·8	−12·5	7	−18
	Blackpool 𝔐	61	43	58·1	50·4	54·1	+5·9	85	0	2	0·91	−0·01	4·8	−13·0	7	−18
	Manchester	63	43	58·6	48·4	53·4	+6·1	80	0	2	0·11	−0·81	4·5†	?	6†	?
	Liverpool Obsy. (Bidston)	66	46	59·7	51·0	55·2	+6·5	92	0	2	0·12	−0·66	*	*	*	*
	Llandudno 𝔐	70	47	60·8	54·1	57·4	+7·4	108	0	2	0·41	−0·44	5·2	−11·1	7	−16
	Holyhead	60	50	58·1	53·6	55·8	+5·2	97	0	3	0·41	−0·58	*	*	*	*
8. ENGLAND, S.W.	Llandovery	65	31	61·4	46·0	53·5	+5·2	81	0	6	1·44	+0·20	*	*	*	*
	Pembroke	59	47	57·7	53·0	55·3	+4·3	93	0	4	1·01	+0·13	17·2	−4·6	24	−7
	Bristol (Montpelier)	66	42	61·7	50·4	55·9	+7·6	97	0	3	1·52	?	*	*	*	*
	Arlington (N. Devon)	65	38	59·6	48·9	54·1	+5·3	85	0	5	1·46	+0·13	*	*	*	*
	Cullompton 𝔐	65	34	62·3	48·7	55·3	+6·5	93	0	3	0·34	−0·54	21·7	+1·5	30	+3
	Falmouth	62	47	60·6	52·3	56·2	+4·9	99	0	5	0·48	−0·72	26·3	+0·5	36	+1
	Plymouth	62	40	60·6	50·5	55·4	+4·6	94	0	4	0·71	−0·16	21·4	−1·4	29	−2
	Prawle Point	62	47	59·1	53·0	56·0	+5·0	98	0	4	0·55	−0·28	*	*	*	*
9. IRELAND, N.	Malin Head	60	49	56·7	51·9	54·1	+7·0	85	0	5	0·24	?	*	*	*	*
	Londonderry	62	44	59·2	47·9	53·4	+5·8	80	0	5	0·35	−0·62	*	*	*	*
	Edenfel (Omagh)	61	31	56·1	47·1	51·5	+5·5	67	0	6	0·69	−0·12	*	*	*	*
	Belmullet	58	45	57·0	51·9	54·2	+3·6	85	0	4	0·27	?	*	*	*	*
	Markree Castle	63	32	59·1	44·9	51·8	+4·7	69	0	3	0·38	−0·52	11·0	−7·9	15	−11
	Brookeborough	62	35	58·5	46·0	52·1	+6·2	71	0	3	0·51	−0·42	*	*	*	*
	Armagh	62	41	59·3	47·8	53·4	+6·6	80	0	3	0·22	−0·46	15·4	−1·6	22	−2
	Donaghadee	63	46	58·9	50·9	54·8	+6·6	90	0	3	0·17	−0·54	*	*	*	*
	Edgeworthstown	?	34	?	46·1	?	?	?	0	2	0·64	−0·06	*	*	*	*
10. IRELAND, S.	Dublin	68	41	60·3	50·8	55·4	+6·4	94	0	4	0·24	−0·46	5·4	−16·7	8	−23
	Parsonstown	65	39	60·1	49·4	54·6	+7·3	88	0	4	0·97	+0·26	10·2	−9·8	14	−14
	Kilkenny	63	38	59·3	49·3	54·2	+6·0	85	0	4	1·13	+0·43	*	*	*	*
	Waterford	65	34	58·4	48·9	53·5	+3·2	81	0	4	0·93	+0·03	*	*	*	*
	Roche's Point	62	45	59·1	52·1	55·5	+4·8	95	0	4	1·42	+0·52	*	*	*	*
	Valencia	62	40	59·4	50·7	54·9	+3·8	90	0	6	0·92	−0·41	15·7	−6·3	22	−8
	Killarney	62	37	59·5	48·0	53·6	+4·0	81	0	5	1·16	?	*	*	*	*
	Foynes	64	39	60·2	47·8	53·8	+6·0	83	0	4	1·30	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	64	50	61·0	54·1	57·5	+4·6	109	0	5	0·18	−0·67	*	*	*	*
	Jersey	65	45	62·7	52·7	57·6	+4·7	109	0	3	0·09	−0·93	37·3	+9·8	51	+14

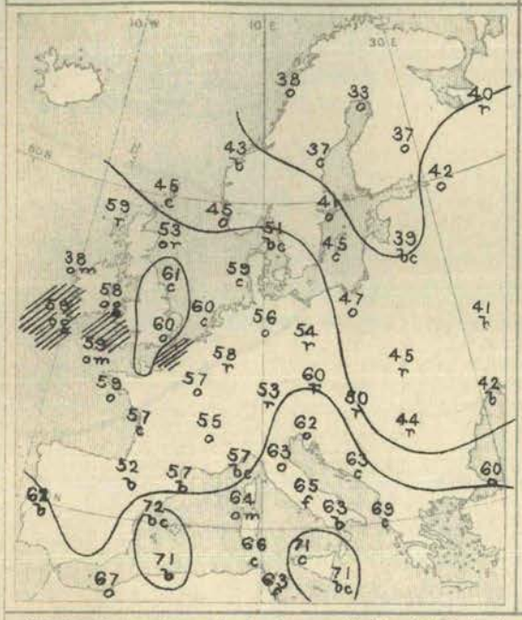
Stations marked 𝔐 are in connection with the Royal Meteorological Society, and those marked Ꞩ with the Scottish Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

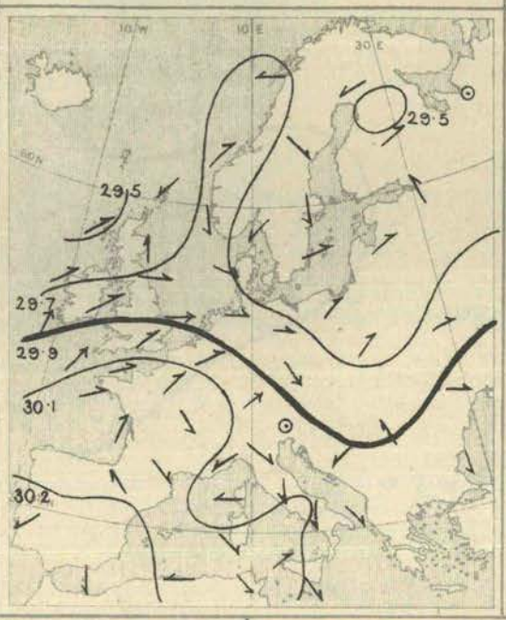
† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row) at the Kew Observatory, and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

Sunday, 15th October.

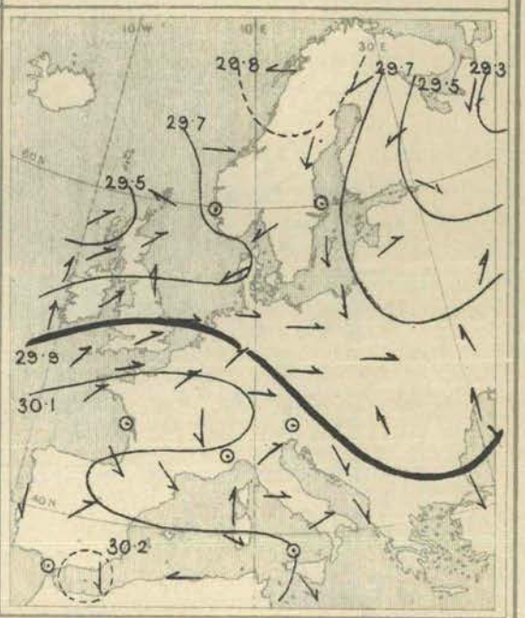
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning continuing fine over the Spanish Peninsula, fair over the Mediterranean, fine and bright over the south of Russia; dull and unsettled in all other countries, with rain in many parts of Austria, Germany, the Netherlands, the British Islands, and north of Russia. Further falls of rain in these regions later, but weather fine over France, the south of England, Sweden, and Norway.

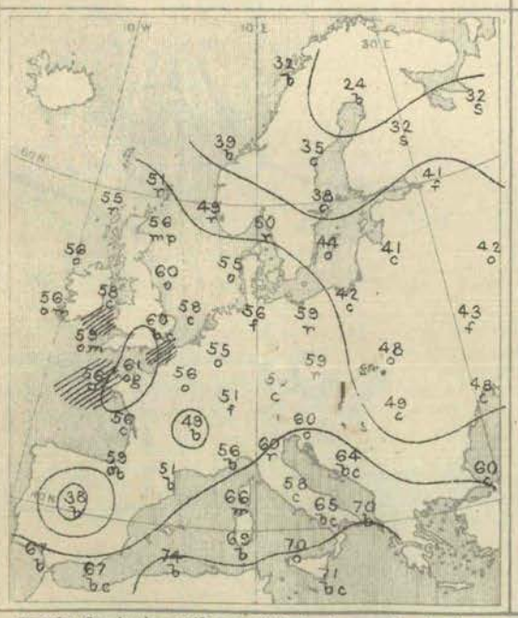
Temperature risen fast over central Europe, fallen over the south of Russia, very high for time of year over England. Morning readings highest, 71° at Malta, exceeding 60° on the Spanish, the southern French, and Italian coasts, and touching 60° at many English stations. Lowest, 33° to 39° in Lapland and the northern parts of Sweden and Finland, 39° at Riga, 40° at Kharkov and Odessa; 41° at Stockholm, 45° at Sumburgh Head. Rising later to between 60° and 67° over many parts of Great Britain, exceeding 70° over southern Europe generally, and reaching 81° at Palermo and 84° at Perpignan.

Wind Southerly to Westerly, and fresh, over Ireland and England; variable and light over Scotland and Norway; Northerly to North-Westerly over Sweden, North-Westerly over Denmark, western Germany, and Hungary, South-Westerly (light) over Poland and the Baltic Provinces, North-Easterly at the northern extremity of the Gulf of Bothnia. Very variable breezes still prevalent over the southern countries and the Mediterranean. Becoming South-Westerly in Scotland later, little change elsewhere.

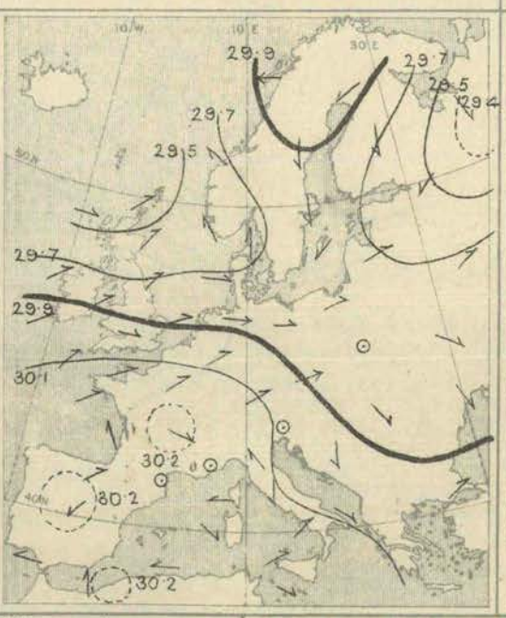
Barometer highest, 30·2 ins. and more to 30·0 ins. over the Iberian Peninsula, the Mediterranean, and France, and exceeding 30·0 ins. over the Baltic Peninsula also. Lowest, 29·5 ins. and less to 29·6 ins. (1) over Finland and northern Russia generally, and (2) over Scotland, the Hebrides, and neighbouring parts of the Atlantic. Rising a little over Denmark, the Baltic, and Germany later, falling slightly in the north of Scotland and the south-west of Ireland. Depression over Finland moving eastwards and growing deeper.

Monday, 16th October.

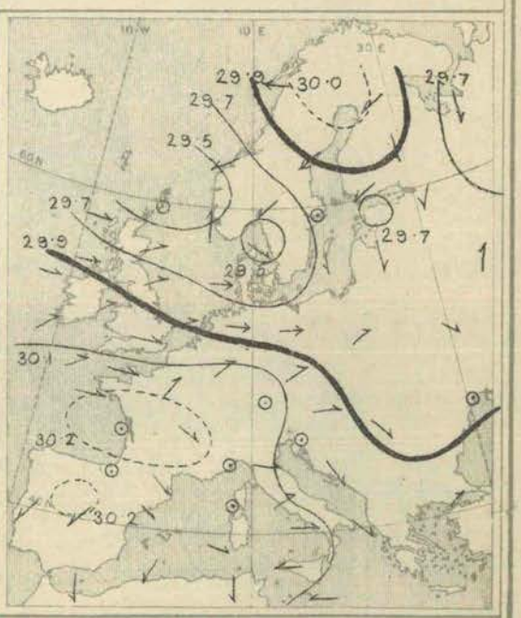
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fine in the south-east of England, as well as in the west of Norway and many parts of southern Europe. Cloudy or overcast elsewhere, with passing showers at many of our own northern stations, and steady rain in the north of Scotland, as well as in Germany and Denmark; snow falling at Archangel and Kuopio. Sky clearing later in many parts of our Islands, but rain continuing in the extreme north. Snow setting in at Hernösand in evening.

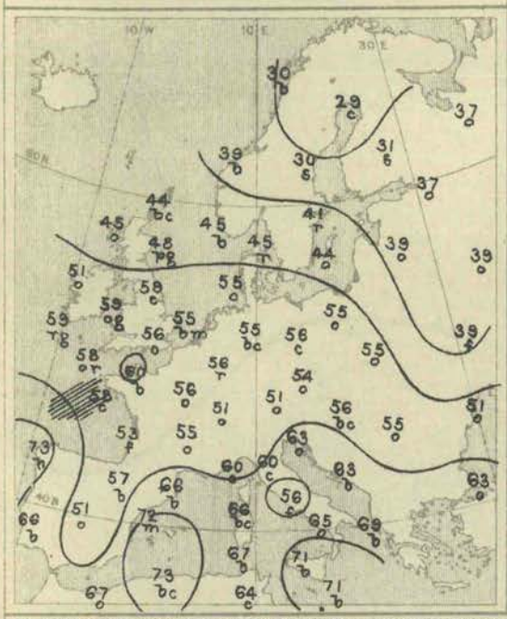
Temperature changed very irregularly in the western countries, but fallen in the northern and risen in the south-eastern parts of Europe. Morning readings highest, 74° at Algiers, 71° at Barcelona and Malta, and 70° at Brindisi and Palermo, above 65° at the Mediterranean stations generally, and ranging between 57° and 61° over England. Lowest, 24° at Haparanda, 28° at Uleaborg, 32° at Archangel, Kuopio, and Bodö, and 35° at Hernösand, below 45° at most of the Scandinavian, Russian, and Baltic stations. Rising during day to between 60° and 65° in most parts of the United Kingdom, and reaching 68° at Loughborough and Cambridge, exceeding 70° over southern Europe generally, and reaching 81° at Palermo.

Wind light to fresh from the South-Westward over our Islands, the Netherlands, Germany, and the north of France; South-Easterly or Easterly at the Norwegian stations. Light from the Northward over Sweden and northern Russia, variable over the southern and central parts of Russia. Westerly or North-Westerly in Austria. Northerly or North-Westerly in Italy; calm or light and variable in Spain, Algeria, and the south of France. Subsequently veering to the Westward in many parts of our Islands, no important change occurring elsewhere.

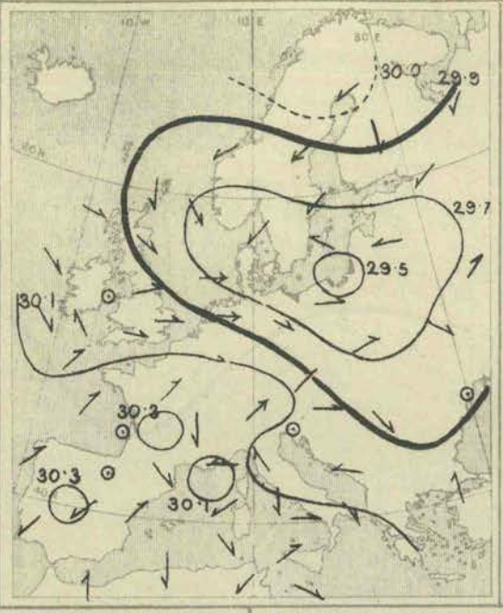
Barometer highest, 30·1 ins. to 30·3 ins. in a large anticyclone covering France and the greater part of southern Europe and the Mediterranean. Lowest, 29·4 ins. and less in a depression lying off the north of Scotland, and also in another system over the extreme north of Russia. Former disturbance subsequently moving eastwards; secondary system forming over the north of Denmark in evening.

Tuesday, 17th October.

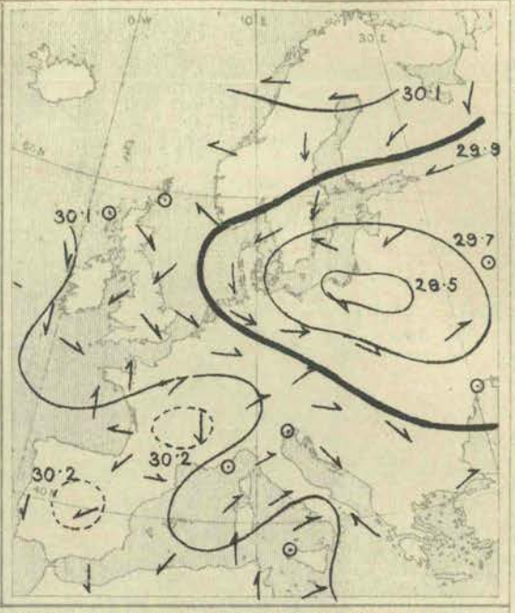
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather dull in most parts of the United Kingdom, with rain at all our south-western stations, as well as at Oxford. Fine and bright in the west of Norway and also in the west of France and most parts of southern Europe; cloudy in all other parts of the Continent, with rain at Stockholm and Skagen, and snow at Kuopio and Hernösand. Sky clearing later at some of our northern stations, but heavy rain falling in the south and south-west of our Islands, the largest amounts being 1·6 ins. at Hurst Castle and 0·8 in. in London. Thunder and lightning occurring at Hurst Castle at night.

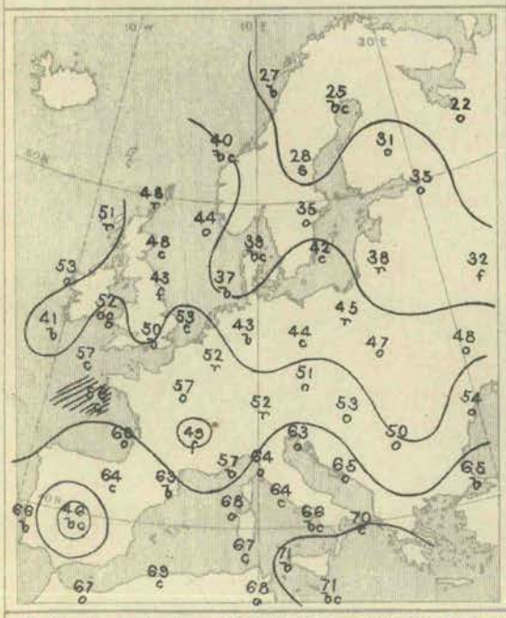
Temperature risen at the Baltic stations as well as in Spain, the south of France, and the north of Italy, fallen elsewhere. Morning readings highest, 73° at Corunna and Algiers, 72° at Barcelona, and 71° at Palermo and Malta, above 60° over southern Europe generally, as well as at some of the Channel stations. Lowest, 29° at Haparanda and Uleaborg, 30° at Bodö and Hernösand, and 31° at Kuopio, below 40° over the northern and central parts of Russia and Scandinavia generally. Rising during day to between 60° and 65° on our southern and south-eastern coasts, as well as at Leith; exceeding 70° over the southern parts of France and Italy, and reaching 82° at Lisbon.

Wind variable on our south-west coasts, but moderate from the South-Westward over the Channel and north of France, and from the Westward or North-Westward in all the more northern and eastern parts of the United Kingdom. Moderate to strong from the Westward in Denmark and Germany, Easterly or North-Easterly over Scandinavia and northern Russia. Light and variable over the greater part of southern and eastern Europe. Subsequently shifting to the Northward over Ireland and the north of England, but falling calm in the north of Scotland.

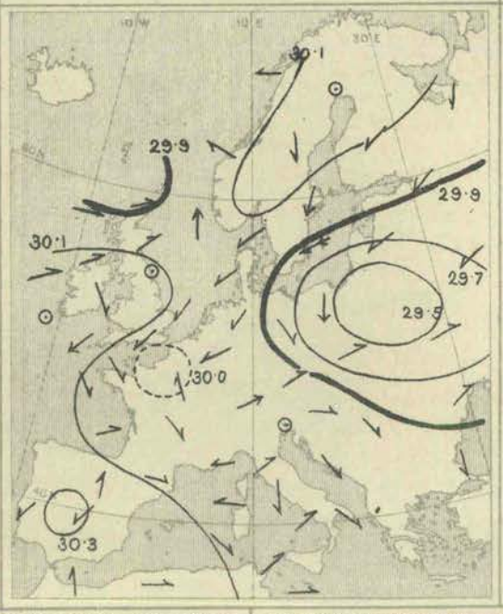
Barometer highest, 30·2 ins. to 30·3 ins. in two separate areas lying respectively over Spain and over France and south Germany; 30·0 ins. and upwards in the north of Scandinavia. Lowest, 29·5 ins. and less in a depression over the Baltic. Small disturbance forming later near the mouth of the St. George's Channel and moving slowly in an east-south-easterly direction across the south-west of England, barometer falling rather decidedly at some of our southern stations. Baltic depression travelling away over Russia and becoming rather deeper.

Wednesday, 18th October.

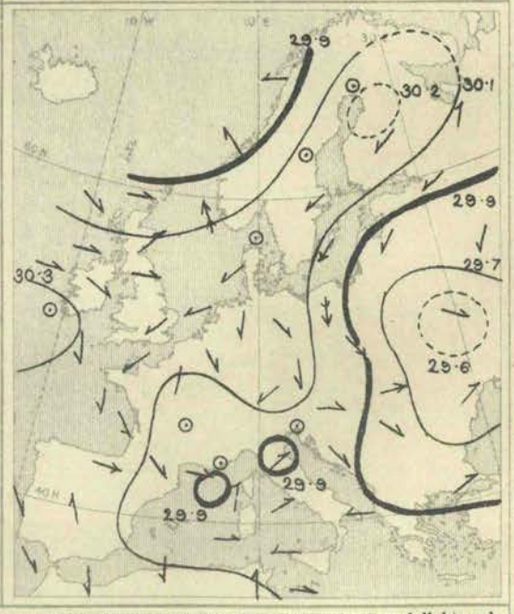
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright at many stations in Ireland, England, Spain, and southern Europe, as well as over Lapland, Norway, and Denmark, dull and very unsettled elsewhere, with rain in the extreme north of our Islands, as well as over Belgium and the north-east of France, the north-east of Germany, and the Baltic Provinces. Considerable rain at Munich later, and slight falls in the extreme west and north of the British Isles and in some parts of Norway.

Temperature fallen decidedly over the United Kingdom, Sweden, the Baltic, and Germany. Morning readings highest, 70° to 71° at Brindisi, Palermo, and Malta, and above 60° at most stations in southern Europe; exceeding 50° over France and the south and west of the British Isles. Lowest, (1) 22° at Archangel, 25° to 28° over Lapland and the northern parts of Sweden and Finland, 32° at Moscow and Hangö; (2) 40° at Cork, and 43° at Leith, Shields, and Loughborough. Touching 60° at a very few of our stations later, 66° at Rochefort, 70° at Nice, 81° at Marseilles, and 82° at Lisbon.

Wind (1) light and anticyclonic over Ireland and the north and west of England, and light and variable over southern Europe generally; (2) South-Westerly over Scotland, Southerly to Easterly on the Norwegian coast; (3) North-Easterly to Northerly, strong to a gale, over the Baltic and north Germany, South-Westerly and Westerly over south Germany and the south of Russia; (4) small cyclonic circulation over the north-east of France and the eastern half of the Channel. Falling light from North-East in the south-east of England later, but Westerly airs becoming general on our north and north-west coasts.

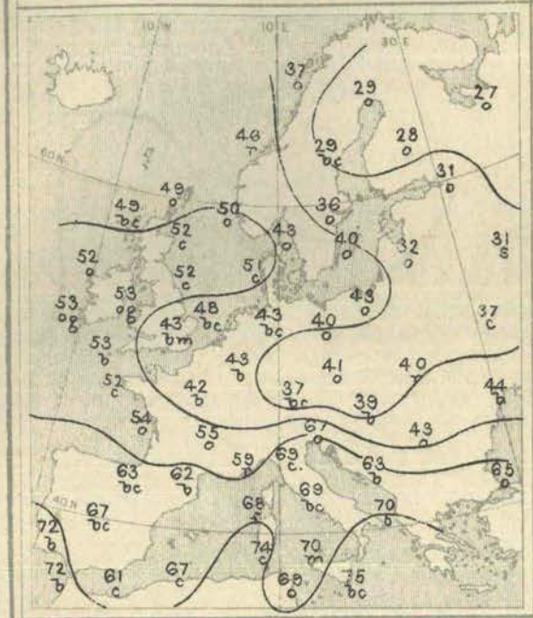
Barometer highest, (1) 30·2 ins. and more to 30·1 ins. over northern Africa, the Spanish Peninsula, the Bay of Biscay, Ireland, and the west and north of England; (2) 30·1 ins. and more over Lapland, Sweden, and the northern half of Finland. Lowest, 29·4 ins. over Poland and western Russia, 29·9 ins. and less off the extreme north of Scotland, and below 30·0 ins. in a small depression over the north-east of France. The Russian and French disturbances moving south-eastwards later, that in the north moving north-eastwards. Barometer rising in our Islands, and anticyclone spreading over the United Kingdom from the westward.

Judd & Co Ltd Lith. 63, Carter Lane

Thursday, 19th October.

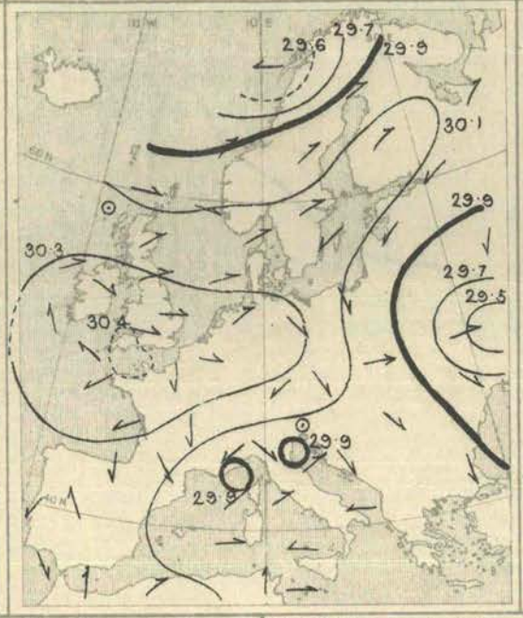
Temperature and Weather.

8 a.m.

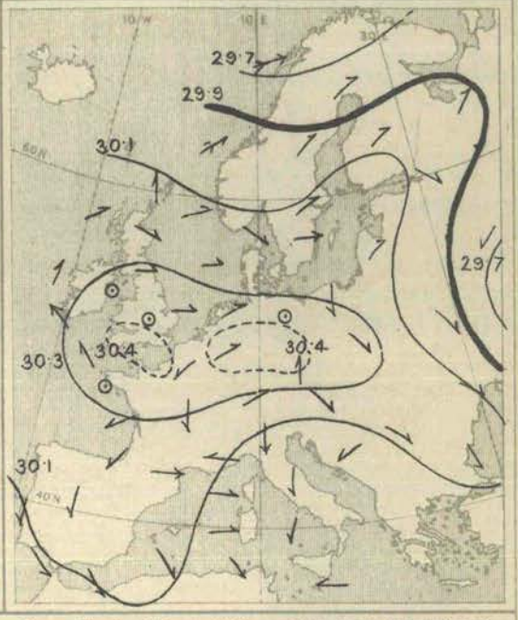


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning fine and bright over the greater part of southern Europe, Austria, and France, as well as at several stations over England and on the shores of the Baltic, cloudy or overcast and unsettled elsewhere, with showers in the northern parts of Ireland and Scotland and the west of Norway, rain and snow over the southern parts of Russia, and slight rain at Nice. A little rain later at our extreme north-western and northern stations, a considerable fall in the north of Norway, and small quantities in some parts of north Germany; remaining fine over England and France.

Temperature fallen decidedly over central and south-eastern Europe, moderately over England, risen over Ireland, Scotland, and Norway. Morning readings highest, 60° to 74° over the extreme southern countries, and exceeding 50° on the Atlantic coasts of France and the British Isles. Lowest, 27° to 31° over northern Europe, 32° at Riga, 37° at Kiev and Breslau, 38° at Warsaw; 39° at Loughborough and Wiesbaden; 42° at Paris. Rising to slightly above 60° in many parts of our Islands later, to 72° at Nice, to 86° at Lisbon, and to between 80° and 90° over Algeria.

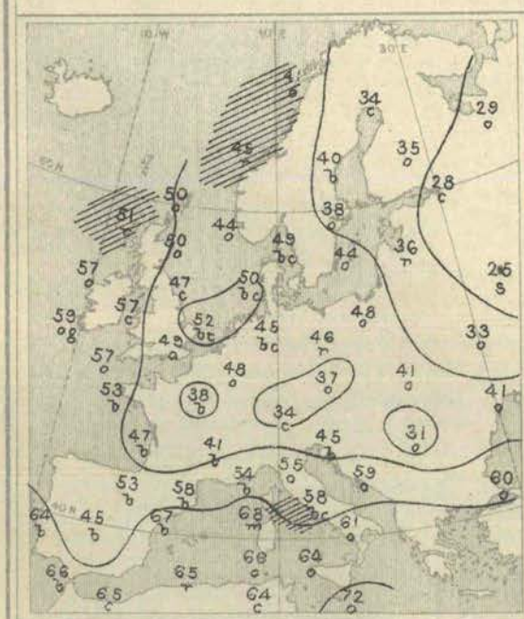
Wind light and anticyclonic over France, England, the north Sea, and Germany; Westerly and South-Westerly in the north of our Islands, South-South-Westerly at Christiansund and at Haparanda, and Easterly at Bodö; Northerly over the Baltic Provinces, Westerly over Hungary and the south of Russia, South-Westerly at Kharkov. Other slight cyclonic circulations observed over the Gulf of Genoa and the north of the Adriatic. Freshening from South-East and South in the west of Ireland later, little change elsewhere.

Barometer highest, 30·4 ins. to 30·1 ins. in a large anticyclone covering nearly the whole of western Europe. Lowest, about 29·5 ins. in a depression having its centre off the north-west of Norway and another over the southern half of Russia; and about 29·9 ins. in two small systems, one near Pesaro, the other between Corsica and the Riviera. Falling somewhat in the west of Ireland later, and the fall spreading northward. Depression over the south of Russia travelling slowly away to the south-eastward.

Friday, 20th October.

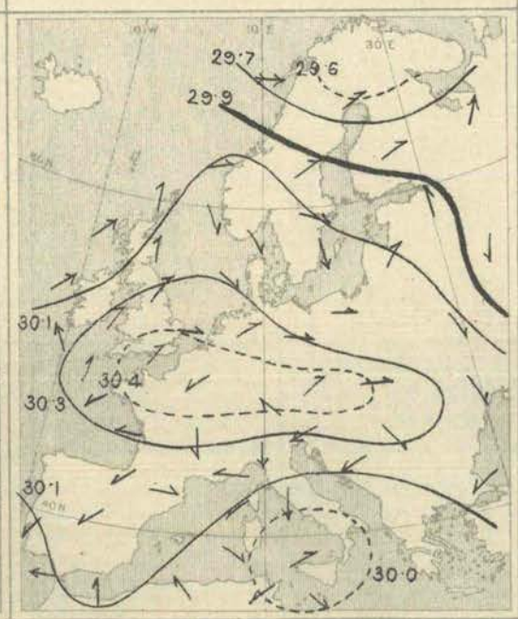
Temperature and Weather.

8 a.m.

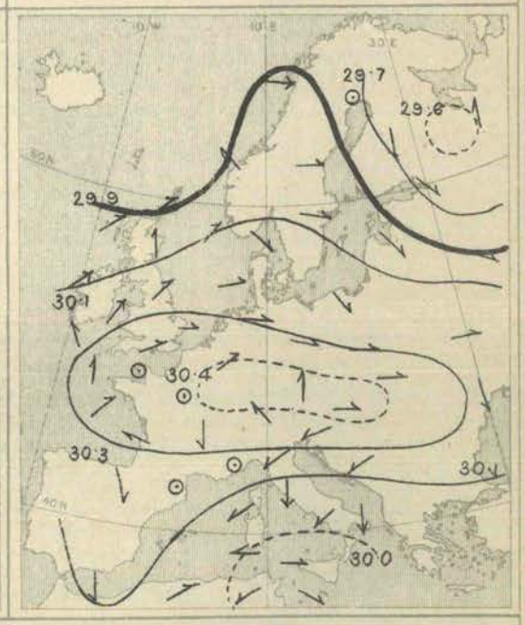


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning fine and bright over the Mediterranean and southern Europe, and the greater part of France and Denmark; fair over the British Islands as a whole, but dull in the west and north and in Norway, with rain at some stations, as well as at Riga; also snow at Moscow. Further falls of rain in Scotland and the west of Norway, and slight showers in some parts of Germany, Ireland, and various parts of Russia. A heavy local fall reported at Algiers and about 0·4 in. at Aumale.

Temperature exceeding 70° at Malta only; exceeding 60° at many of the most southern stations, and touching 59° at Lésina, Cape Sicié, and Valencia (Ireland). Lowest, 25° at Moscow, 28° at St. Petersburg, 29° at Archangel, and 30° at Kharkov; 34° at Munich, 37° at Vienna, 38° at Paris; 39° at Oxford, 42° at Dungeness. Rising quickly over England and France later, and exceeding 60° at many of our own stations and over the southern parts of France; touching 75° to 80° over the south of Italy and over Algeria.

Wind light and anticyclonic over central Europe; fresh from between North-East and North over the Mediterranean, light Easterly over the Bay of Biscay, moderate to strong from South on our own western coasts, Westerly over northern Europe (a gale at Bodö), North-Westerly over the Baltic. Very little change of a general character reported later, but the gale at Bodö dying down.

Barometer highest, 30·4 ins. and more to 30·1 ins. in a large anticyclone covering nearly the whole of Europe. Lowest, 29·6 ins. and less in a depression over Lapland; 30·0 ins. and less off our extreme north-west coasts, and also in a shallow depression covering Malta, Sicily, and the south of Italy. Falling throughout our Islands during day, and anticyclone moving slowly to the south-eastward.

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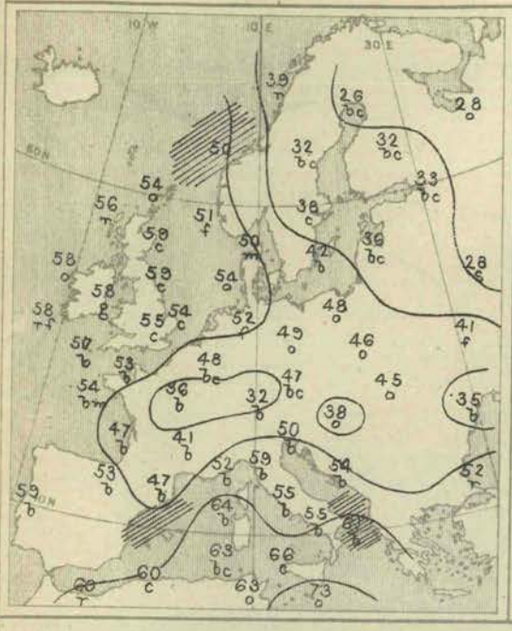
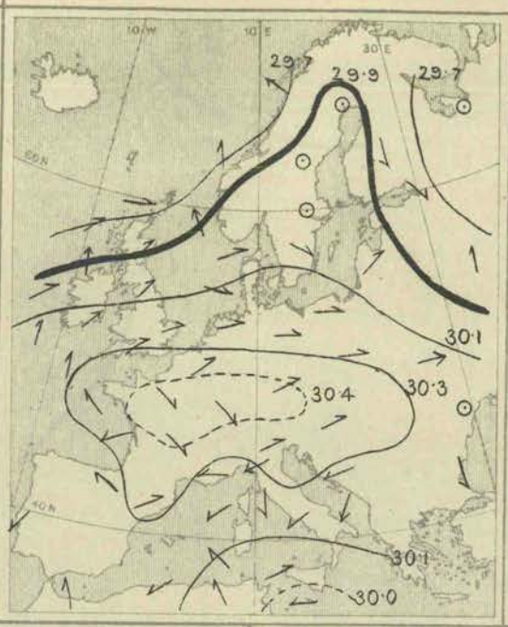
Saturday, 21st October.

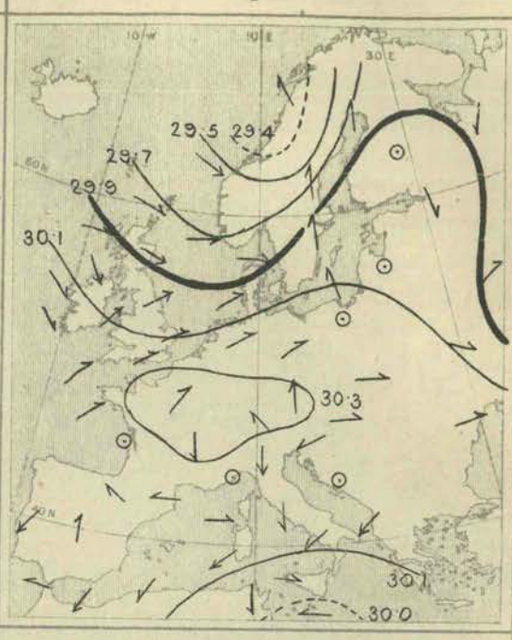
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over the whole of southern Europe and the greater part of France, as well as over Sweden; fair over Germany, the Netherlands, and Great Britain, but cloudy, and in some places foggy or hazy. Rain setting in at our north-western stations and spreading later on to all parts of the Kingdom, as well as to the eastern shores of the North Sea and Sweden. A heavy local fall at Palermo.

Temperature risen greatly over England and also over Russia, but changes not of a permanent character. Morning readings highest, 73° at Malta, and exceeding 60° in the far south generally, and in many parts of our Islands, low over France. Lowest, 28° to 33° over northern Europe and 36° at Riga; 28° to 33° over the south of Russia also; 36° at Paris, 39° at Le Mans, 41° at Lyons. Giving way over our Islands later but rising over France.

Wind moderate North-Easterly to Easterly over the southern countries; Southerly to South-Westerly, moderate to fresh, over our Islands, South-Easterly in Norway; calm over Sweden, North-Westerly, light, over Finland. Shifting to West in Norway later, and to North-West in Ireland and Scotland, but remaining South-Westerly over England and the North Sea.

Barometer highest, 30·4 ins. and more to 30·0 ins. in a large anticyclone covering all but the northern and north-western countries. Lowest, 29·6 ins. to 29·7 ins. over the north of Russia, and 29·7 ins. or less off the north-west of Norway and the extreme north of our Islands; below 30·0 ins. in the neighbourhood of Malta. Rising suddenly and considerably in Ireland and Scotland later, falling over northern and central Europe.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force is indicated thus: ⟫⟶ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze: and ⊙ = a calm. In the left-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Germany, Sweden, and Norway, and 7 a.m. in France, Algeria, Italy, Austria, and Russia; that for 6 p.m. is prepared from observations made at 6 p.m. in the British Islands and France, 7 p.m. in Algeria, 8 p.m. in Sweden and Norway, Germany, and Austria, and 9 p.m. in Russia, Belgium, and Italy. The time indicated in each case is the standard time for each country.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 248.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	20·1	?	29	?	EASTBOURNE	19·9	?	27	?
OSWALDKIRK (Yorkshire)	11·5	?	16	?	TENBY	14·6*	?	20*	?
WORKSOP	8·6	− 9·6	12	−14	NEWQUAY	22·0	?	30	?
THURCASTON (Leicestershire)	10·4	− 8·3	14	−12	TORQUAY	27·3*	?	37*	?
MARGATE	24·4	?	34	?	ARLEY COTTAGE (County Cavan)	6·1	?	9	?
WESTBOURNE (Sussex)	23·8*	?	33*	?	GUERNSEY	29·2*	?	40*	?
BRIGHTON	25·2	?	35	?					

* The values at Westbourne, Tenby, Torquay and Guernsey are obtained by Jordan's Photographic Recorder.

WEEKLY WEATHER REPORT.

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VOL. X. No. 43.] *Third Series.* WEEK ENDING SATURDAY, 28TH OCTOBER, 1893. [*Price 6d.* *Annual Subscription, post paid*, £1 10s. 0d.

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871-90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the twenty-five years 1866-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the ten years 1881-90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

DISTRICTS. (See p. 254.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 1st, 1893. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
	°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts. 0. SCOTLAND, NORTH	55	32	50·7	40·8	45·7	2 above.	31	+ 2	3	- 6	2325	+558	495	- 76
1. SCOTLAND, EAST	60	34	52·9	40·8	46·6	3 above.	37	+ 4	3	- 8	2604	+361	572	- 27
2. ENGLAND, N.E.	61	36	54·7	42·1	48·2	2 above.	43	+ 7	0	- 6	2856	+458	440	- 74
3. ENGLAND, EAST	58	34	54·3	41·3	47·6	1 above.	42	+ 1	2	- 8	3323	+547	526	- 60
4. MIDLAND COUNTIES	60	33	55·0	41·9	48·3	3 above.	45	+ 6	0	-11	3403	+688	510	- 76
5. ENGLAND, SOUTH	60	35	55·9	43·6	49·5	2 above.	53	+ 5	0	- 7	3626	+621	373	- 61
Principal Grazing, &c., Districts. 6. SCOTLAND, WEST	58	36	53·2	44·0	48·5	3 above.	46	+10	0	- 7	2824	+515	359*	- 76
7. ENGLAND, N.W.	66	39	55·0	46·5	50·7	3 above.	61	+21	0	- 5	3277	+769	323	-101
8. ENGLAND, S.W.	60	33	55·9	44·6	50·1	2 above.	57	+ 8	0	- 3	3533	+638	246	- 79
9. IRELAND, NORTH	57	31	53·1	42·4	47·6	2 above.	39	0	0	- 5	3039	+579	266	-109
10. IRELAND, SOUTH	60	32	56·2	43·0	49·4	1 above.	52	+ 5	0	- 5	3407	+631	184	-104
—CHANNEL ISLANDS	61	41	57·7	49·0	53·2	2 above.	78	+12	0	0	4049	+887	70	- 52

Rainfall. Bright Sunshine.

DISTRICTS. (See p. 254.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the mean for the Week.	From Jan. 1st, 1893. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 1st, 1893. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
		10ths of in.	10ths of ins.			Ins.	Ins.								
Principal Wheat-producing Districts. 0. SCOTLAND, NORTH	7	30	18 more.	202	+ 5	41·9	+ 3·2	7	- 2	11	- 3	957	-130	24	- 3
1. SCOTLAND, EAST	4	7	0 (average)	157	- 5	21·3	- 4·3	21	+13	32	+ 16	1290	+ 35	33	+ 1
2. ENGLAND, N.E.	2	2	5 less.	132	-18	16·3	- 5·2	28	+13	41	+ 17	1454	+301	37	+ 8
3. ENGLAND, EAST	4	2	4 less.	134	-13	16·0	- 5·2	21	0	31	0	1697	+295	44	+ 8
4. MIDLAND COUNTIES	3	2	5 less.	128	-16	16·3	- 7·3	20	+ 2	30	+ 3	1606	+551	41	+ 9
5. ENGLAND, SOUTH	3	3	4 less.	129	-11	18·7	- 3·7	22	+ 1	32	+ 1	1747	+383	45	+ 10
Principal Grazing, &c., Districts. 6. SCOTLAND, WEST	6	21	9 more.	162	- 7	32·4	- 7·5	14	- 1	21	- 3	1436	+194	37	+ 5
7. ENGLAND, N.W.	4	6	3 less.	148	- 8	24·9	- 3·5	15	+ ⅔	22	+ 2	1414	+185	36	+ 5
8. ENGLAND, S.W.	4	5	5 less.	137	-24	26·3	- 6·0	15	- 6	22	- 11	1818	+345	47	+ 9
9. IRELAND, NORTH	6	12	3 more.	173	-11	27·6	- 1·7	12	- 5	17	- 7	1246	+112	32	+ 3
10. IRELAND, SOUTH	4	4	5 less.	151	-16	25·2	- 6·4	17	- 3	25	- 4	1299	+ 79	36	+ 2
—CHANNEL ISLANDS	5	3	7 less.	145	-26	22·2	- 4·1	23	- 2	32	- 2	2142	+412	56	+ 11

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather during this period was very wet in the extreme north and north-west, heavy rain falling almost daily; in the more southern and eastern districts, however, the rainfall was slight and infrequent, and several fine and dry intervals were experienced.

Temperature continued above the mean in all districts, the excess ranging from 1° in England E. and Ireland S., to 2° or 3° elsewhere. The highest of the maxima were recorded, as a rule, either on the first or last day of the week, when the thermometer rose to 66° in England N.W., to 61° in England N.E. and the Channel Islands, and to between 57° and 60° in all other districts excepting Scotland N., where the highest reading was 55°. The lowest of the minima occurred on the 27th, and ranged from 31° in England N.W., and 32° in Scotland N. and Ireland S., to 39° in England N.W., and to 41° in the Channel Islands.

Rainfall greatly exceeded the mean in Scotland N. and W. and slightly in Ireland N.; in Scotland E. the fall was just equal to the normal, while in all the other districts there was a a large deficit. Some of the falls experienced in the north and west of Scotland were unusually large—thus, on the 24th, as much as 3·38 ins. was measured at Glencarron, 3·25 ins. at Fort William, and 2·32 ins. at Fort Augustus.

Bright Sunshine was more prevalent generally than it was during the preceding week; it exceeded the mean in most of the "Wheat producing" districts, and showed a deficit in nearly all the "Grazing" districts. The percentage of the possible amount of duration ranged from 41 in England N.E., to 32 in Scotland E., England S., and the Channel Islands, to 17 in Ireland N., and to 11 in Scotland N.

Barometer and Wind.—During the whole of this period, barometric pressure over our Islands was affected by large and rather deep depressions, whose course, eastwards to Scandinavia, lay to the northward of Scotland, and by their secondary disturbances which passed directly across our Islands, South-Westerly to North-Westerly winds, varying considerably in force, consequently prevailed over the United Kingdom, but at the end of the week the wind showed a tendency to veer to the Northward.

* This value has been altered owing to the receipt for further information for a preceding week.

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II.—DATA from which the SUMMARY on page 253 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°				Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head Ⓢ	52	37	49·3	40·7	44·9	+ 0·8	26	4	7	1·69	+0·72	*	*	*	*
	Stornoway Ⓢ	53	36	50·0	41·3	45·5	+ 1·2	27	2	7	0·72	−0·43	15·2	− 1·5	23	− 3
	Wick Ⓢ	55	35	50·9	40·4	45·5	+ 1·2	31	4	7	0·84	+0·14	*	*	*	*
	Lairg Ⓢ	53	32	50·4	37·9	44·0	+ 0·4	31	11	7	1·76	+0·84	*	*	*	
	Glencarron Ⓢ	54	34	50·4	40·2	45·2	+ 2·0	30	5	7	6·56	+4·40	*	*	*	*
	Fort Augustus Ⓢ	55	36	52·0	40·9	46·3	+ 2·2	35	3	7	3·64	+2·72	1·7	?	3	?
	Fort William Ⓢ	55	39	52·1	44·5	48·2	+ 2·9	43	0	7	5·69	+3·89	4·8	?	7	?
1. SCOTLAND, E.	Nairn	56	35	52·3	42·0	47·0	+ 2·6	35	0	5	0·96	+0·44	*	*	*	*
	Aberdeen	60	36	54·0	42·6	48·1	+ 3·2	43	0	5	0·38	−0·30	28·9	+10·1	44	+16
	Braemar Ⓢ	55	34	49·8	39·0	44·2	+ 2·9	28	8	5	0·72	−0·18	18·7†	?†	28†	?†
	Ochtertyre Ⓢ	59	34	53·7	39·3	46·3	+ 2·5	41	8	4	1·13	+0·13	*	*	*	*
	Leith	58	37	54·4	42·4	48·2	+ 2·0	43	0	3	0·73	+0·25	*	*	*	*
	Marchmont Ⓢ	56	35	52·9	39·4	46·0	+ 2·5	39	7	1	0·33	−0·45	17·0	?	26	?
2. ENGLAND, N.E.	Alnwick Castle	59	38	53·3	43·3	48·2	+ 2·7	43	0	2	0·08	−0·63	*	*	*	*
	Durham	59	38	55·5	40·7	47·9	+ 3·0	47	4	2	0·16	−0·49	26·3	+ 8·9	39	+14
	Shields	61	36	55·4	39·6	47·3	+ 1·4	47	7	1	0·16	−0·38	*	*	*	*
	Scarborough Ⓜ	58	38	54·4	41·8	47·9	− 1·0	42	1	3	0·26	−0·44	*	*	*	*
	York	60	36	55·7	41·6	48·4	+ 2·6	46	1	3	0·25	−0·35	30·8	+14·8	45	+21
	Spurn Head	58	41	53·9	45·3	49·5	+ 1·8	53	0	3	0·12	−0·40	*	*	*	*
3. ENGLAND, E.	Hillington Ⓜ	57	34	54·8	39·0	46·7	+ 0·3	46	8	4	0·16	−0·46	22·6	+ 3·9	33	+ 5
	Yarmouth	55	39	52·7	43·1	47·8	+ 0·4	41	0	4	0·24	−0·45	*	*	*	*
	Geldeston	57	37	55·0	40·1	47·3	+ 0·1	45	5	4	0·22	−0·38	19·0	− 3·2	28	− 4
	Cambridge	58	39	55·0	42·6	48·6	+ 2·4	46	0	4	0·21	−0·30	21·9	+ 0·9	32	0
	Rothamsted	56	38	53·8	41·9	47·7	+ 2·1	40	0	2	0·09	−0·56	19·9	?	29	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	58	38	55·0	41·1	47·8	+ 2·2	44	3	3	0·19	−0·39	*	*	*	*
	Loughborough	60	38	56·6	43·9	50·1	+ 4·3	57	0	3	0·23	−0·37	*	*	*	*
	Stamford (Ketton Hall)	58	39	55·7	42·4	48·9	+ 3·1	48	0	3	0·17	−0·47	*	*	*	*
	Cheadle Ⓜ	56	38	53·4	41·8	47·4	+ 2·8	39	1	4	0·42	−0·41	*	*	*	*
	Churchstoke Ⓜ	57	33	54·5	41·2	47·7	+ 2·5	43	2	2	0·12	−0·66	19·0	+ 1·5	28	+ 2
	Hereford Ⓜ	59	36	55·8	42·0	48·7	+ 2·4	47	0	2	0·09	−0·51	*	*	*	*
	Cirencester	57	34	53·9	40·7	47·1	+ 1·9	41	4	3	0·11	−0·56	21·3	+ 1·2	31	+ 2
	Oxford	57	36	54·9	42·3	48·4	+ 1·8	45	0	2	0·08	−0·45	17·6	− 3·2	26	− 3
5. ENGLAND, S.	London	58	37	55·1	42·6	48·7	+ 1·2	47	0	2	0·20	−0·35	16·3†	+ 1·3†	24†	+ 2†
	North Foreland	57	43	54·7	46·4	50·4	+ 2·4	59	0	2	0·12	?	*	*	*	*
	Strathfield Turgiss Ⓜ	57	35	54·8	41·3	47·9	+ 1·4	44	2	5	0·26	−0·32	*	*	*	*
	Dungeness	60	37	57·1	44·1	50·4	+ 1·5	59	0	4	0·22	−0·56	*	*	*	*
	Hastings (St. Leonards)	58	39	56·6	45·5	49·9	+ 0·8	55	0	3	0·29	−0·53	26·8	+ 2·6	39	+ 4
	Southampton	59	38	57·4	43·0	50·0	+ 1·8	56	0	4	0·31	−0·39	19·2	− 3·0	28	− 4
	Hurst Castle	59	39	57·3	44·7	50·8	+ 1·4	62	0	3	0·31	−0·42	*	*	*	*
	Stowell Ⓜ	56	35	54·5	41·3	47·7	+ 1·5	43	2	4	0·50	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	58	37	54·1	43·4	48·6	+ 3·3	46	0	7	4·11	+2·27	*	*	*	*
	Glasgow	54	36	51·6	42·8	47·1	+ 2·2	36	0	5	1·93	+1·07	9·6	− 2·1	15	− 2
	Ardrossan	55	40	53·1	47·0	50·0	+ 3·2	56	0	7	1·61	+0·74	*	*	*	*
	Glenlee Ⓢ	55	37	53·1	42·5	47·6	+ 3·5	39	0	6	2·26	+0·99	*	*	*	*
	Douglas (Isle of Man)	56	36	54·0	44·4	49·1	+ 2·2	50	0	5	0·48	−0·50	17·7	− 2·3	26	− 3
7. ENGLAND, N.W.	Stonyhurst	56	39	52·9	43·8	48·2	+ 2·4	43	0	4	1·18	+0·07	20·7	+ 5·5	30	+ 7
	Blackpool Ⓜ	66	39	56·8	47·0	51·8	+ 4·9	69	0	4	0·37	−0·53	15·3	+ 0·3	23	0
	Manchester	59	40	54·8	43·5	49·0	+ 3·2	49	0	3	0·85	−0·08	10·4†	?	15†	?
	Liverpool Obsy. (Bidston)	59	42	54·9	47·1	50·9	+ 3·7	62	0	3	0·42	−0·33	*	*	*	*
	Llandudno Ⓜ	63	45	55·4	48·7	52·0	+ 3·3	70	0	5	0·55	−0·28	13·7	− 1·3	20	− 2
	Holyhead	58	46	55·1	49·1	52·0	+ 2·6	70	0	3	0·30	−0·70	*	*	*	*
8. ENGLAND, S.W.	Llandovery	58	33	55·6	40·0	47·6	+ 0·8	48	6	5	0·73	−0·52	*	*	*	*
	Pembroke	59	46	55·9	49·4	52·6	+ 2·7	74	0	3	0·36	−0·52	13·7	− 6·1	20	−10
	Bristol (Montpelier)	58	35	55·4	42·9	49·0	+ 2·2	49	0	4	0·43	?	*	*	*	*
	Arlington (N. Devon)	55	36	54·1	43·4	48·6	+ 1·2	46	0	5	1·26	−0·14	*	*	*	*
	Cullompton Ⓜ	58	34	56·2	40·0	47·9	+ 0·3	50	6	5	0·52	−0·28	16·4	− 1·6	24	− 1
	Falmouth	58	45	56·5	46·7	51·5	+ 1·2	67	0	4	0·39	−0·82	13·3	−11·2	19	−15
	Plymouth	60	41	56·9	46·7	51·7	+ 2·3	68	0	4	0·19	−0·73	12·5	− 7·6	18	−11
	Prawle Point	60	41	56·6	47·3	51·8	+ 2·1	69	0	4	0·31	−0·51	*	*	*	*
9. IRELAND, N.	Malin Head	55	41	52·1	46·6	49·3	+ 3·4	51	0	7	1·25	?	*	*	*	*
	Londonderry	57	40	53·7	44·4	48·9	+ 2·6	48	0	6	1·40	+0·42	*	*	*	*
	Edenfel (Omagh)	55	31	51·6	41·4	46·4	+ 1·7	33	2	6	1·37	+0·55	*	*	*	*
	Belmullet	57	43	54·4	46·1	50·1	+ 0·7	57	0	6	1·53	?	*	*	*	*
	Markree Castle	56	33	54·4	41·5	47·8	+ 2·0	43	1	5	1·57	+0·66	11·6	− 6·2	17	− 8
	Brookeborough	56	34	53·2	39·6	46·2	+ 1·6	39	7	7	1·39	+0·44	*	*	*	*
	Armagh	56	37	53·4	41·3	47·3	+ 2·1	38	1	5	0·81	+0·14	12·2	− 3·6	18	− 5
	Donaghadee	57	39	54·4	42·4	48·2	+ 1·3	43	0	5	0·42	−0·32	*	*	*	*
	Edgeworthstown	53	33	50·8	38·1	44·3	− 0·8	32	11	4	0·71	+0·01	*	*	*	*
10. IRELAND, S.	Dublin	60	38	55·7	43·8	49·6	+ 1·7	53	0	3	0·18	−0·51	20·4	− 0·3	30	0
	Parsonstown	58	34	55·4	38·6	46·8	+ 0·8	48	10	4	0·65	−0·05	12·8	− 6·0	19	− 9
	Kilkenny	58	32	55·7	39·0	47·1	+ 0·1	48	8	3	0·20	−0·50	*	*	*	*
	Waterford	57	34	56·0	41·0	48·3	− 0·9	48	3	4	0·14	−0·74	*	*	*	*
	Roche's Point	60	40	57·0	45·7	51·2	+ 1·6	64	0	3	0·11	−0·83	*	*	*	*
	Valencia	59	38	57·1	45·6	51·2	+ 1·1	64	0	5	0·37	−1·03	17·5	− 3·5	25	− 3
	Killarney	59	33	57·1	43·2	49·9	+ 1·5	55	0	4	0·53	?	*	*	*	*
	Foynes	57	43	55·3	47·3	51·2	+ 4·4	64	0	5	0·63	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	60	48	57·4	51·6	54·4	+ 2·4	87	0	4	0·22	−0·66	*	*	*	*
	Jersey	61	41	58·0	46·3	52·0	+ 0·7	70	0	5	0·36	−0·70	23·3	− 2·0	33	− 2

Stations marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

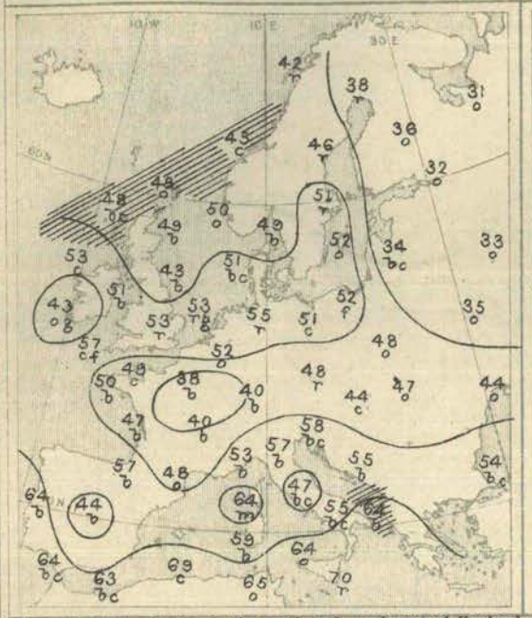
* An asterisk is inserted in all places for which the information is not usually received.

† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row) at the Kew Observatory, and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

Sunday, 22nd October.

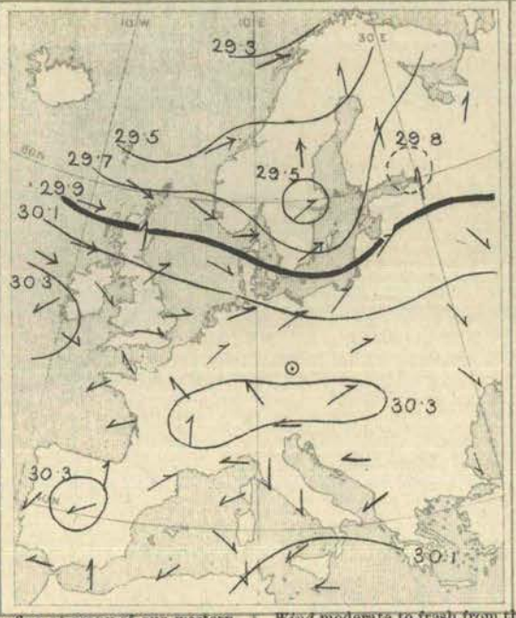
Temperature and Weather.

8 a.m.

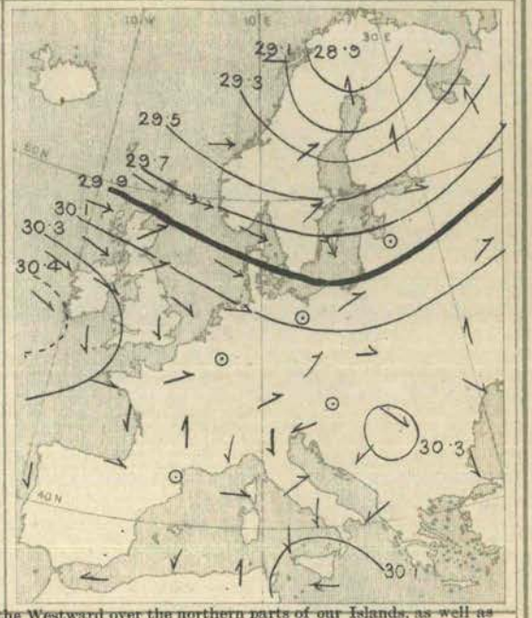


Barometer and Wind.

8 a.m.



6 p.m.



Weather dull and rainy in the south and south-east of England; fine at many of our western and northern stations, but showery in some parts of Scotland. Fine in Denmark, and also in France, Spain, and Italy, cloudy in other parts of the Continent, with rain in Sweden, north Germany, and the Netherlands, as well as at Malta and Tunis. Weather improving over England later, but heavy rain falling at some of the Scandinavian stations.

Temperature fallen rapidly in Ireland and to a less extent in most other parts of north-western Europe, risen elsewhere. Morning readings highest, 70° at Malta, 69° at Algiers, and 65° at Barcelona and La Calle; above 55° in many parts of southern Europe, but below 50° over central Spain. Lowest, (1) 31° at Archangel, 32° at St. Petersburg, 33° at Moscow, and 34° at Riga and Kharkov; (2) 37° at Parsonstown, 42° at Donaghadee, and 43° at Shields and Valencia (Ireland); (3) 38° at Paris, and 39° at Le Mans. Rising during day to between 55° and 60° in many parts of the United Kingdom, and to between 65° and 70° in the west and south of France, exceeding 70° in some parts of southern Europe. Ground frost occurring in London at night.

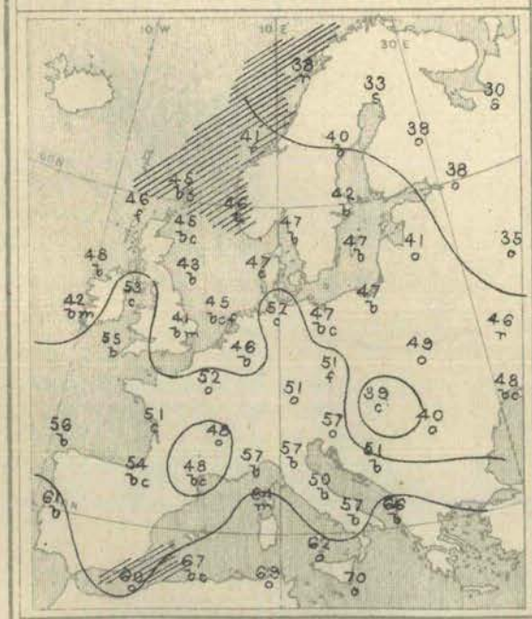
Wind moderate to fresh from the Westward over the northern parts of our Islands, as well as in Norway and Denmark; South-Westerly over Germany and the Baltic; Southerly in Finland and the north of Sweden. Variable over central England, Westerly or North-Westerly over our southern counties. Light from the Eastward over the greater part of France, and from the North-Eastward or Northward over Spain and Italy; variable in Austria. Subsequently veering to the Northward over the south of England, Westerly gale setting in over the south of Norway; no important change occurring elsewhere.

Barometer highest, 30·3 ins. and upwards over the south of Ireland, and also over central Spain, and in an elongated area extending from central France to Hungary; 30·1 ins. and upwards in an anticyclone covering Ireland, England, and all the more central and southern parts of Europe. Lowest, 29·4 ins. and less in a depression over the north of Scandinavia; 29·5 ins. and less in a small secondary system near Stockholm. General rise taking place over our Islands during day, and an anticyclone spreading over from the south-westward. Depressions over the north of Scandinavia increasing both in size and depth.

Monday, 23rd October.

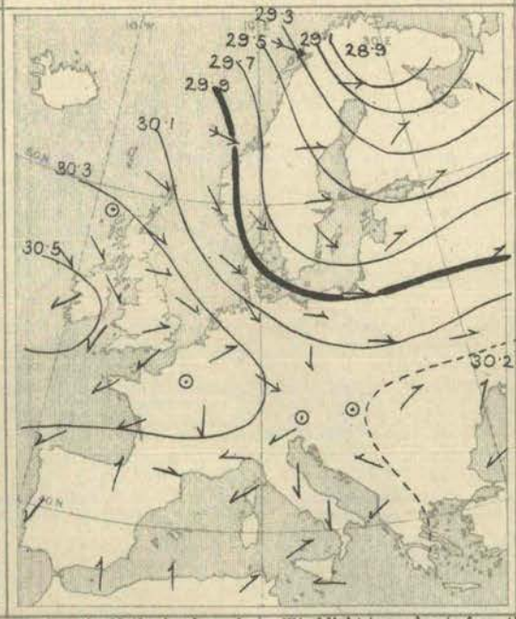
Temperature and Weather.

8 a.m.

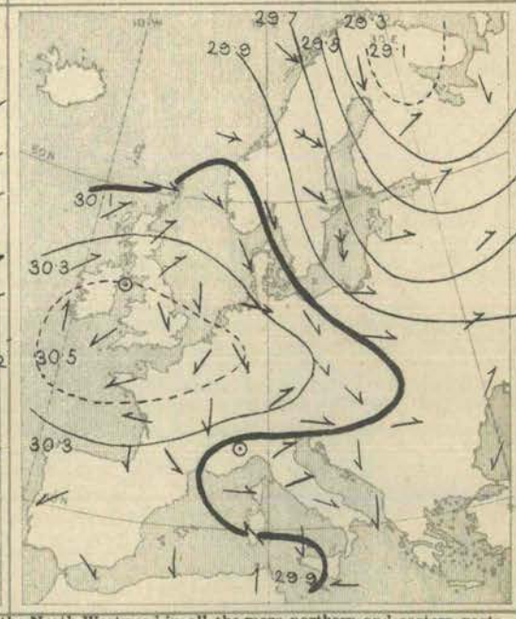


Barometer and Wind.

8 a.m.



6 p.m.



Weather fine over the greater part of our Islands, as well as over Sweden, the Netherlands, and southern Europe generally. Dull in France and also in Russia; rainy in the west of Norway, as well as at some of the Danish and German stations; snow falling at Haparanda and Archangel. Very little change occurring later, but slight rain falling at night on our extreme north and north-west coasts.

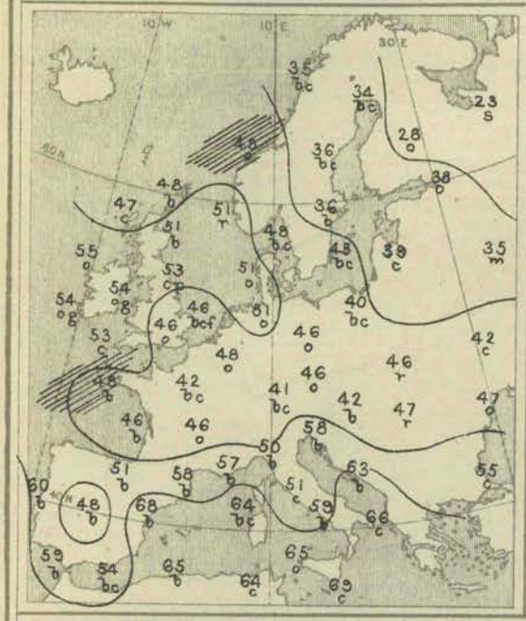
Temperature falling in all but the central and southern countries. Morning readings highest, 70° at Malta, 69° at La Calle, 67° at Algiers, and 66° at Brindisi; above 60° at most of the Mediterranean stations. Lowest, 30° at Archangel, 33° at Haparanda and Kharkov, and 35° at Moscow; below 40° in several parts of northern Europe, as well as over central Ireland; below 45° at some of the inland English stations. Rising later to 55° or a little more in several parts of the United Kingdom, and touching 60° at some of our south-western stations. Exceeding 70° over southern Europe and reaching 81° at Oporto.

Wind light to moderate from the North-Westward in all the more northern and eastern parts of our Islands, but Northerly or North-Easterly in the south. Strong to a gale from the North-Westward over Norway and Denmark, moderate to strong from the Westward over Sweden, Germany, and the Baltic; light from the South-Westward in Russia. Calm in Austria; light from the Northward in Spain and Italy; variable in France, Southerly in Algeria. Subsequently backing to the South-Westward over the northern parts of our Islands; gale on eastern shores of the North Sea dying down.

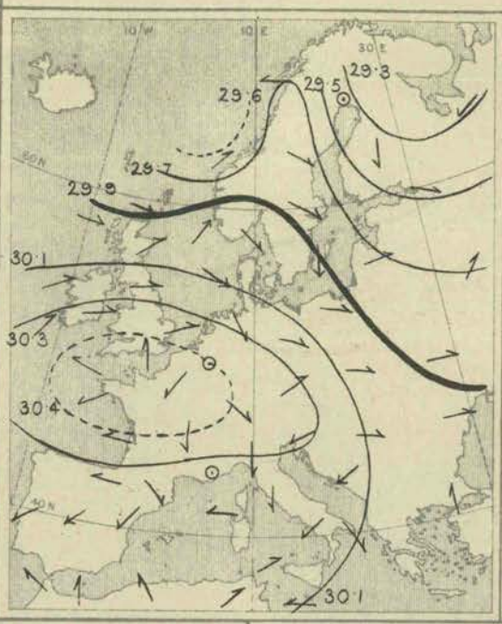
Barometer highest, 30·5 ins. and upwards over the south of Ireland; 30·2 ins. and upwards in an anticyclone covering the greater part of western Europe, as well as in another system lying over the south-eastern countries. Lowest, 29·9 ins. and less in a well-marked depression over Lapland; gradients rather steep over northern Europe generally. Anticyclone over western Europe subsequently moving southwards, and new depression beginning to advance towards our extreme north-west coasts.

Tuesday, 24th October.

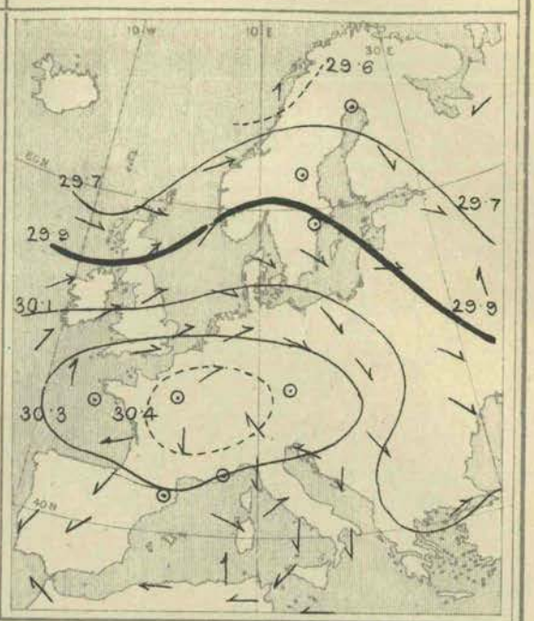
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fair over the greater part of our Islands, but dull in many places and showery at one or two of our northern stations. Fine in Sweden, as well as over the greater part of France and southern Europe: dull in Russia, Germany, eastern Austria, and the west of Norway, with rain in a few places, and with snow at Archangel. Heavy rain falling later in the extreme north-west of our Islands; no important change occurring elsewhere.

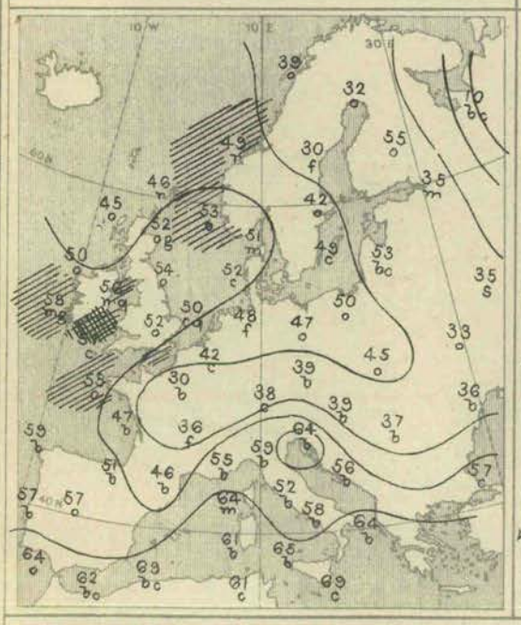
Temperature risen in most of the north-western countries, as well as in Italy and Austria, but fallen elsewhere. Morning readings highest, 69° at Malta, 68° at Barcelona, 67° at Oporto, and 66° at Brindisi; above 55° over southern Europe generally, and above 50° in many parts of the United Kingdom. Lowest, 23° at Archangel, 28° at Kuopio, 34° at Haparanda, and 35° at Bodö and Moscow, below 40° at most of the Scandinavian and northern Russian stations. Rising during day to between 55° and 58° in most parts of the United Kingdom, exceeding 60° in France, and exceeding 70° over southern Europe generally.

Wind light to moderate from the South-Westward over all but the extreme southern parts of our Islands, and strong from the same quarter in the west of Norway. Westerly or North-Westerly over Sweden, Denmark, Germany, and the Baltic, South-Westerly over the central and southern parts of Russia. Light from the Eastward or North-Eastward in France and Spain, and from the Northward over the greater part of Italy. Southerly or South-Easterly in Algeria. Subsequently increasing to a strong breeze from the South-Westward on some of the more exposed parts of our north and north-west coasts.

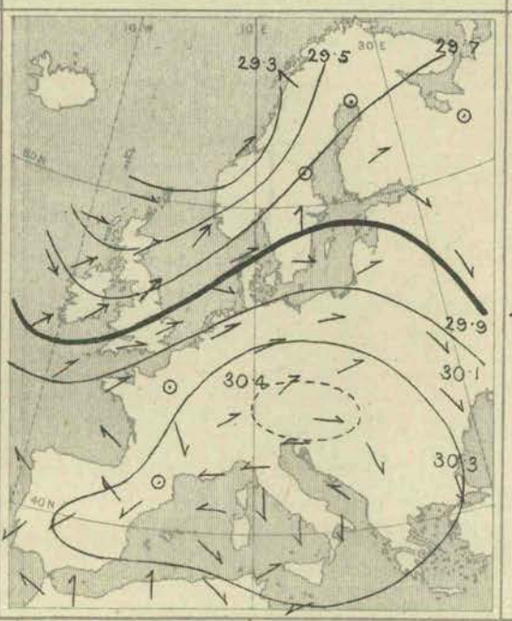
Barometer highest, 30·4 ins. and upwards over the south of England, the north of France, Belgium, and south-western Germany. Lowest, 29·3 ins. and less in a depression over Lapland, 29·7 ins. and less in another disturbance off the west of Norway. Secondary disturbances beginning to approach our Islands later, and barometer falling decidedly on our western and northern coasts. Depression over Lapland moving eastwards and filling up.

Wednesday, 25th October.

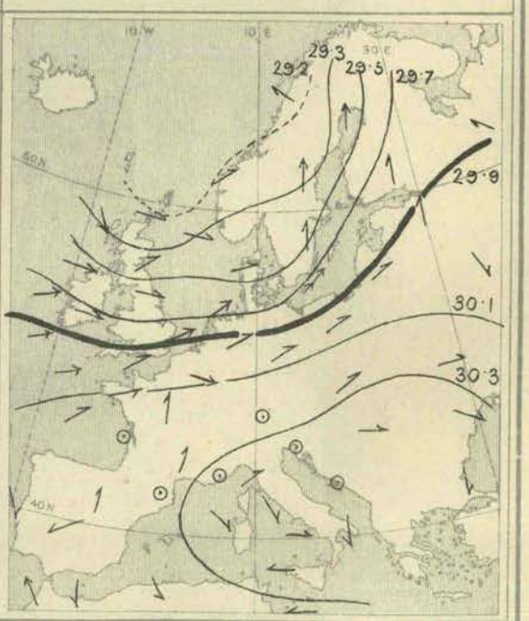
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning dull over north-western, northern, and central Europe, with rain in Ireland and Scotland, as well as at some of the Scandinavian stations, and with snow at Moscow. Fine and bright over France, Spain, Italy, Austria, and the extreme south of Russia. Rain falling later in all parts of our Islands—amounts large at some of our northern stations, and also in the north of Scandinavia. Lightning seen at Belmullet at night.

Temperature risen in most of the north-western and northern countries, but fallen elsewhere. Morning readings highest, 69° at Malta and Algiers, 66° at Barcelona, and 65° at Palermo; above 60° at several of the Mediterranean and Adriatic stations, and above 55° on our own western coasts. Lowest, (1) 10° at Archangel, 30° at Hernösand, 32° at Haparanda, and 33° at Riga and Kiev; (2) 30° at Paris, and 36° at Lyons. Rising during day to between 55° and 60° in most parts of England and Ireland, but remaining below 50° in the extreme north of Scotland. Reaching 70° or more over southern Europe generally, the highest reading of all being 77° at Palermo.

Wind fresh or strong from the South-Westward over our Islands and the eastern shores of the North Sea; light from the same quarter or from South over Germany, the Baltic, and Finland. Light from the North-Westward over the central and southern parts of Russia, from the Northward in Italy, from the North-Eastward in Spain, and from the Eastward in the west and south of France. Variable in Austria and also in central France. Subsequently veering to the Westward in most parts of the United Kingdom. Increasing to a gale from the Southward in Sweden and the south of Norway.

Barometer highest, 30·4 ins. and upwards over the northern parts of Austria; 30·2 ins. and upwards in a large anticyclone covering the whole of central and southern Europe. Lowest, 29·3 ins. and less in a large depression lying off the Norwegian coasts. Gradients rather steep over the whole of our Islands and the North Sea. Small "V" shaped secondary disturbances moving eastwards across our Islands during day, and barometer falling in most districts. Anticyclone over central Europe moving eastwards.

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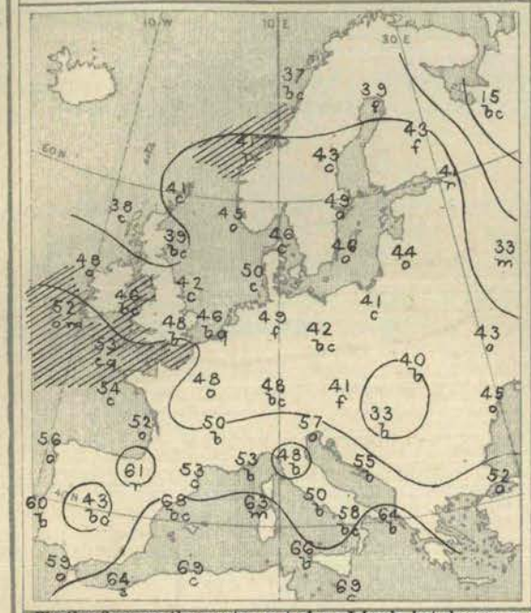
Thursday, 26th October.

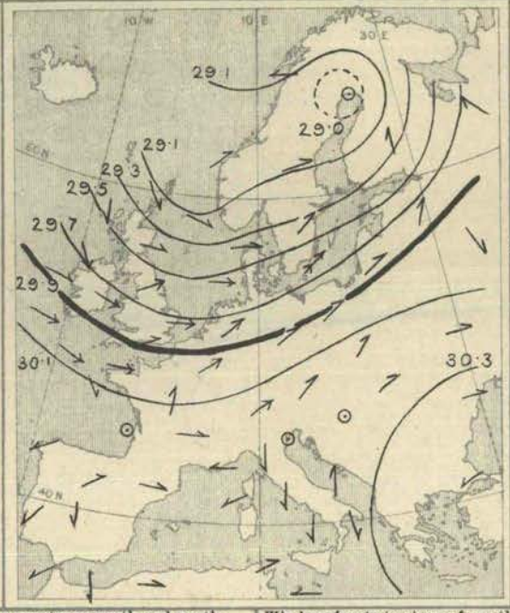
Temperature and Weather. 8 a.m.



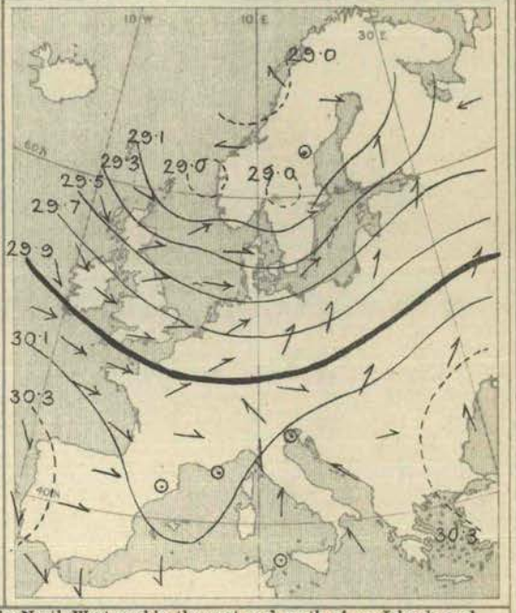
Weather fine over the greater part of our Islands, but showery on our extreme north and north-west coasts, with snow at Wick. Cloudy or overcast at most of the Continental stations, with rain over the Gulf of Finland, as well as at Copenhagen and Biarritz. Fine over Italy, Austria, and the south of France. Showers falling later in all but the extreme south-eastern parts of the United Kingdom, as well as in France and Germany. Considerable quantities of rain falling in Norway and Denmark, with a thunderstorm at Fanö, and also at the Helder. Heavy rain falling in the north of Italy and extreme south of France.

Temperature fallen several degrees over the north-western and central countries, but risen elsewhere. Morning readings highest, 69° at Malta and Algiers, 68° at Barcelona, 66° at Palermo, and 64° at Brindisi and Oran; above 55° in most parts of southern Europe. Lowest, 15° at Archangel, 32° at Cracow, and 33° at Moscow and Buda-Pesth, below 40° in the north of Scandinavia, and also at most of the Scotch stations. Daily maxima below 50° in all the more northern parts of the United Kingdom, but thermometer exceeding 55° at some of our south-western stations, exceeding 65° over the southern parts of France, and exceeding 70° in Spain and Italy.

Barometer and Wind. 8 a.m.



6 p.m.

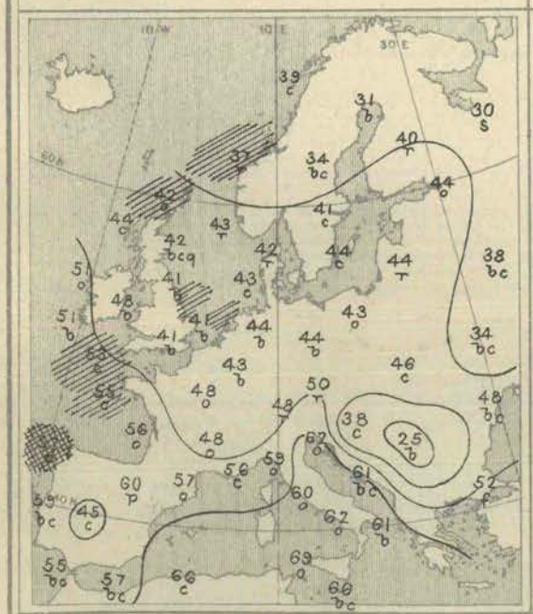


Wind moderate to strong from the North-Westward in the west and north of our Islands, and from the Westward or South-Westward on our south and east coasts. Strong from the South-Westward over Denmark, north Germany, and the Baltic; light from the Southward or South-Eastward in the north of Russia. Variable over Austria and the south of Russia; Northerly in Italy; North-Easterly in Spain. No important change occurring later.

Barometer highest, 30·3 ins. and upwards over the extreme south-eastern parts of Europe; 30·2 ins. and upwards over the Spanish Peninsula. Lowest, 29·0 ins. and less in a small depression over Lapland, 29·1 ins. and less over the north of Scandinavia generally, and the adjacent parts of the Atlantic; gradients rather steep over all the more northern parts of Europe. Barometer rising slightly later over the northern parts of the United Kingdom, but falling in the south.

Friday, 27th October.

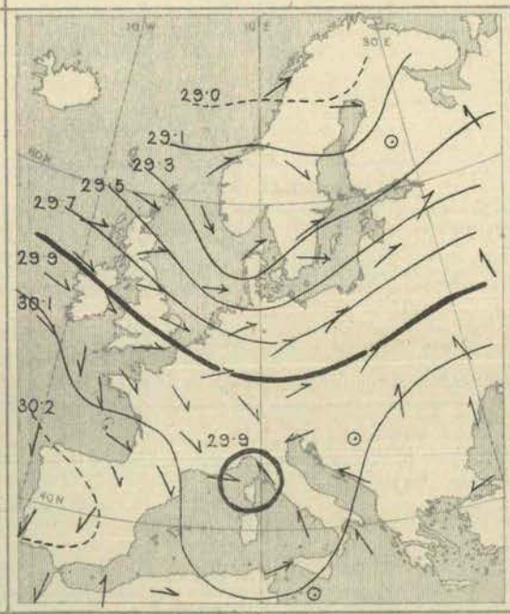
Temperature and Weather. 8 a.m.



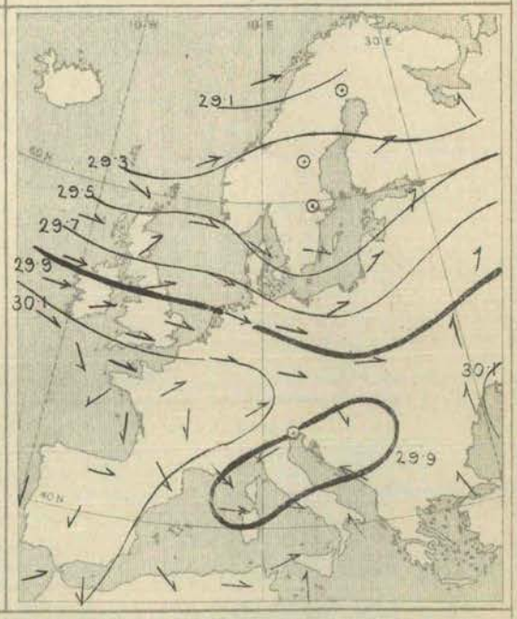
Weather fine over the greater part of our Islands, the Netherlands, and north Germany, but dull on our extreme north and north-west coasts. Cloudy or dull over the greater part of the Continent, with rain in Denmark, the west of Norway, and south Germany, as well as at Kuopio, Helsingfors, and Riga; snow reported at Archangel. Fine in the south of Russia and the south of Spain, as well as at the Adriatic stations. Showers falling later at many of our own western and northern stations, but weather remaining fine over the greater part of England. Heavy falls of rain (locally) over various parts of central and southern Europe.

Temperature risen in the north of our Islands, as well as in Russia, Austria, and Italy, fallen elsewhere. Morning readings highest, 69° at Palermo, 66° at Malta and Algiers, and 62° at Trieste and Naples; above 55° over southern Europe generally. Lowest, 30° at Archangel, 31° at Haparanda, and 34° at Uleaborg and Hernösand; very little above 40° over the eastern and central parts of Great Britain. Rising during day to between 50° and 55° over our Islands generally, and to a little above 55° on our extreme south-west coasts. Exceeding 60° in the west and south of France, and exceeding 70° in the southern parts of Spain and Italy.

Barometer and Wind. 8 a.m.



6 p.m.

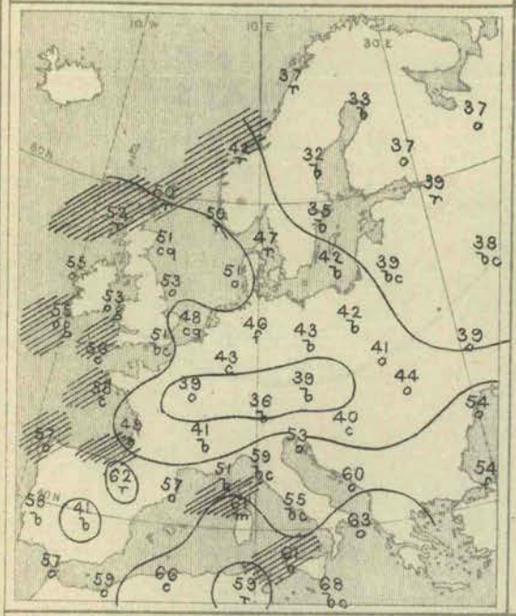


Wind moderate to fresh from the North-Westward over the greater part of western Europe, strong from the Westward or South-Westward over Denmark, the Baltic, and the Gulf of Finland, light from the Southward over Russia. Easterly at most of the Italian stations, and North-Easterly over the Spanish Peninsula; variable in Austria and Algeria. Subsequently backing to the Westward in many parts of our Islands; no important change occurring elsewhere.

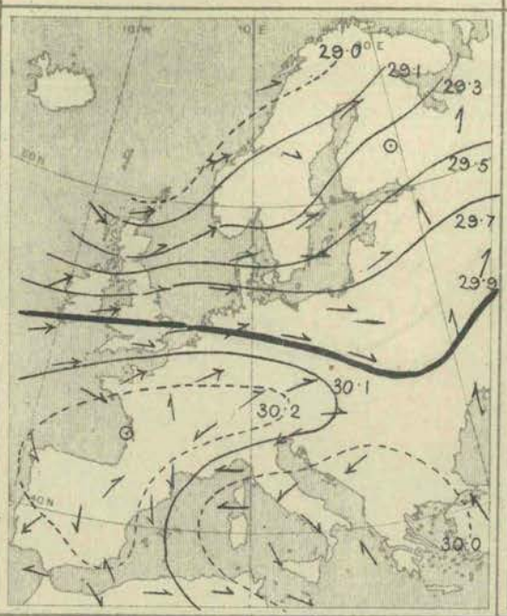
Barometer highest, 30·2 ins. and upwards over Portugal and central Spain; 30·1 ins. and upwards over all the south-western and south-eastern parts of Europe. Lowest, 29·0 ins. and less in a depression off the north-west of Norway; 29·9 ins. and less in a shallow system over the Gulf of Genoa. New disturbance beginning to appear to the northward of our Islands later, and barometer falling at all our northern stations. Depression over Gulf of Genoa increasing in size and moving eastwards.

Saturday, 28th October.

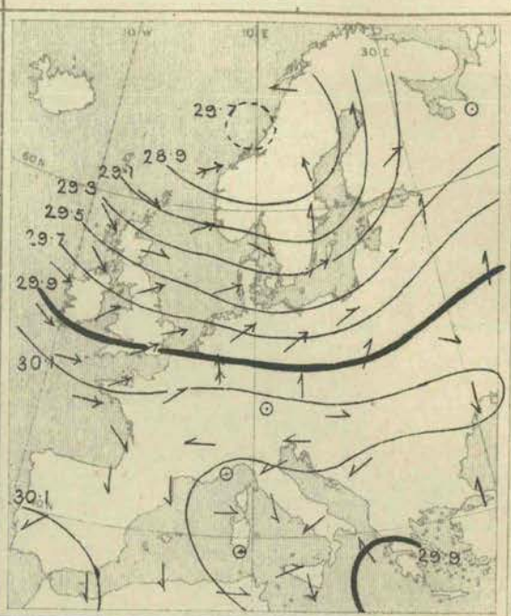
Temperature and Weather. — 8 a.m.



Barometer and Wind. — 8 a.m.



Barometer and Wind. — 6 p.m.



Weather cloudy and unsettled over our Islands, the west of France, and the greater part of northern and eastern Europe, with showers at several of our southern stations, and with steady rain on our extreme north and north-west coasts, as well as in Norway and the north of Denmark. Fine and bright over Sweden, Germany, and the greater part of southern Europe. Rain falling during day in almost all parts of the north-western and northern countries—amounts large at some of the Scandinavian stations.

Temperature risen considerably in our Islands, but fallen at most of the Continental stations. Morning readings highest, 68° at Malta, 66° at Algiers, 64° at Sfax, and 63° at Brindisi; varying between 50° and 55° in most parts of the United Kingdom. Lowest, 32° at Hernösand, 33° at Haparanda and Uleaborg, and 37° at Bodö, Archangel, and Kuopio; below 40° at most of the Swedish and Russian stations. Rising during day to between 55° and 59° in most parts of our Islands, and reaching 60° at Aberdeen. Exceeding 60° in the west and south of France, and exceeding 70° in Spain and Italy.

Wind moderate to strong from the Westward or South-Westward over north-western and northern Europe generally, with a gale at Christiansund; light from the Southward over the central and southern parts of Russia. Cyclonic circulation reported over Italy, the Adriatic, and the central parts of the Mediterranean. Light to moderate from between North and East over the Spanish Peninsula. Subsequently increasing to a moderate gale from the Westward in most parts of the United Kingdom, and to a fresh or strong gale from the South-Westward over the more southern parts of Scandinavia.

Barometer highest, 30·1 ins. and upwards in an anticyclone covering the greater part of Spain, France, and south Germany, and also in another system over the south of Russia. Lowest, 29·0 ins. and less in a large depression lying to the northward of our Islands; gradients rather steep over north-western Europe generally. Depression subsequently moving eastwards to Scandinavia; small secondary disturbances passing across our Islands and the North Sea.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force is indicated thus: ⟹ = a heavy gale; → = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze: and ⊙ = a calm. In the left-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Germany, Sweden, and Norway, and 7 a.m. in France, Algeria, Italy, Austria, and Russia; that for 6 p.m. is prepared from observations made at 6 p.m. in the British Islands and France, 7 p.m. in Algeria, 8 p.m. in Sweden and Norway, Germany, and Austria, and 9 p.m. in Russia, Belgium, and Italy. The time indicated in each case is the standard time for each country.

GENERAL NOTES.

In the course of the week two anticyclones advanced from the Atlantic over the more southern parts of Europe, while numerous large depressions skirted our extreme northern coasts in an easterly or north-easterly direction, and passed on to Scandinavia and northern Russia. The type of weather over the north-western and northern countries was, therefore, Westerly, with frequent falls of rain, and occasional gales from the Westward in Scotland and Scandinavia. On one or two occasions the large depressions in the north were accompanied by secondary disturbances, which travelled immediately over our Islands, and in these cases the unsettled weather spread further southwards, rain being experienced even in the south of England and the neighbouring parts of the Continent. In the southern countries the winds were for the most part light and variable, and the weather fine and dry, but, on the 27th, when a depression was developed over the Gulf of Genoa, heavy rain was experienced over the south of France and northern Italy.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 254.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	18·8	?	29	?	EASTBOURNE	27·0	?	39	?
OSWALDKIRK (Yorkshire)	27·4	?	40	?	TENBY	18·3*	?	26*	?
WORKSOP	22·6	+ 3·7	33	+ 8	NEWQUAY	14·5	?	21	?
THURCASTON (Leicestershire)	21·5	+ 7·1	31	+ 6	TORQUAY	18·0*	?	26*	?
MARGATE	21·3	?	31	?	ARLEY COTTAGE (County Cavan)	11·3	?	17	?
WESTBOURNE (Sussex)	20·0*	?	29*	?	GUERNSEY	21·7*	?	31*	?
BRIGHTON	24·3	?	35	?					

* The values at Westbourne, Tenby, Torquay and Guernsey are obtained by Jordan's Photographic Recorder.

Judd & Co. Ltd. Litho. 63, Carter Lane.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; R. H. SCOTT, F.R.S., SECRETARY.

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VOL. X. No. 44.] *Third Series.* WEEK ENDING SATURDAY, 4TH NOVEMBER, 1893. [*Price 6d.* *Annual Subscription, post paid*, £1 10s. 0d.

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871-90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the twenty-five years 1866-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the ten years 1881-90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

	DISTRICTS. (See p. 260.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 1st, 1893. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	47	28	42·5	33·5	38·0	5 below.	1	−24	30	+20	2326	+533	525	− 54
	1. SCOTLAND, EAST	51	25	43·7	32·6	38·2	5 below.	5	−23	34	+19	2609	+337	606	− 3
	2. ENGLAND, N.E.	57	25	47·7	34·8	41·3	4 below.	16	−15	30	+22	2872	+439	470	− 48
	3. ENGLAND, EAST	61	25	50·5	35·2	42·9	2 below.	35	0	19	+ 8	3358	+541	545	− 46
	4. MIDLAND COUNTIES	63	21	50·6	34·9	42·7	2 below.	35	+ 1	20	+ 7	3438	+685	530	− 62
	5. ENGLAND, SOUTH	63	23	53·0	39·3	46·2	1 below.	41	− 2	8	0	3667	+614	381	− 55
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	58	25	47·6	24·8	41·2	3 below.	16	−15	29	+21	2840	+496	388	− 50
	7. ENGLAND, N.W.	58	28	49·9	38·3	44·1	2 below.	30	− 5	10	+ 4	3307	+760	333	− 93
	8. ENGLAND, S.W.	59	21	53·3	41·2	47·2	0 (average)	40	− 5	2	− 1	3573	+727*	248	− 77
	9. IRELAND, NORTH	57	25	49·5	37·0	43·3	2 below.	30	− 5	14	+ 7	3069	+573	282†	− 96
	10. IRELAND, SOUTH	61	25	52·3	40·1	46·2	1 below.	37	− 6	5	− 1	3444	+622	189	−100
	—CHANNEL ISLANDS	60	32	55·5	46·9	51·3	1 above.	65	+ 3	0	0	4114	+884	70	− 52

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 260.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the mean for the Week.	From Jan. 1st, 1893. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 1st, 1893. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of ins.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	6	17	5 more.	208	+ 5	43·6	+ 3·6	13	+ 1	21	+ 1	970	−128	24	− 3
	1. SCOTLAND, EAST	5	7	0 (average)	162	− 5	22·3	− 4·3	28	+28	44	+ 40	1318	+ 51	33	+ 1
	2. ENGLAND, N.E.	4	4	3 less.	136	−19	16·7	− 5·4	27	+14	41	+ 19	1481	+316	37	+ 8
	3. ENGLAND, EAST	4	3	3 less.	138	−13	16·3	− 5·6	20	0	30	0	1717	+298	43	+ 7
	4. MIDLAND COUNTIES	4	3	4 less.	132	−18	16·6	− 7·6	20	+ 4	31	+ 5	1626	+356	41	+ 9
	5. ENGLAND, SOUTH	3	4	3 less.	132	−13	19·1	− 3·9	19	+ 4	28	+ 3	1766	+386	45	+ 10
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	6	14	2 more.	168	− 7	33·8	− 7·3	26	+13	41	+ 19	1462	+207	37	+ 5
	7. ENGLAND, N.W.	6	7	2 less.	154	− 8	25·6	− 3·7	19	+ 9	29	+ 13	1433	+191	36	+ 5
	8. ENGLAND, S.W.	5	6	5 less.	142	−25	26·9	− 6·5	17	− 1	25	− 3	1835	+345	47	+ 9
	9. IRELAND, NORTH	7	8	1 less.	180	−10	28·4	− 1·8	21	+ 5	33	+ 8	1267	+118	32	+ 3
	10. IRELAND, SOUTH	5	5	4 less.	156	−17	25·7	− 6·8	18	0	28	0	1417	+ 79	36	+ 2
	—CHANNEL ISLANDS	5	6	4 less.	150	−27	22·8	− 4·5	18	− 7	26	− 7	2160	+411	55	+ 11

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather was again unsettled and changeable, with frequent rain, hail, or sleet in the north-west and north, but in the more southern and eastern districts the earlier part of the week was fair and dry, and the rain experienced during the latter half generally slight. Thunder and lightning occurred at some of our southern stations during the night of October 30th-31st.

Temperature was slightly above the mean in the Channel Islands, and about equal to it in England S.W.; in all other districts, however, there was a deficit ranging from 1° in England S. and Ireland S., to 4° in England N.E., and 5° in Scotland E. and N. The highest of the maxima, which were recorded on November 3rd over England and Ireland, and on rather irregular dates in Scotland, ranged from 63° in England S. and the Midland Counties to 51° in Scotland E. and to 47° in Scotland N. The lowest of the minima were registered during the middle part of the week, when the thermometer fell to 21° in the Midland Counties and England S.W., to 23° in England S., and to between 25° and 28° in almost all other districts.

Rainfall again exceeded the mean in the west and north of Scotland, and just equalled it in Scotland E.; in all other parts of the Kingdom the fall was less than the normal, the deficit being, in most cases, considerable.

Bright Sunshine showed an increase in most districts on that recorded during the preceding week and exceeded the mean generally. The percentage of the possible duration ranged from 44 in Scotland E. and 41 in England N.E. and Scotland W., to 26 in the Channel Islands, 25 in England S.W., and to 21 in Scotland N.

Barometer and Wind.—During the earlier half of the period the barometric pressure and winds over our Islands were influenced by an anticyclone which appeared over our western districts from the Atlantic, and moved slowly south-eastwards to France and the Bay of Biscay. During its prevalence the barometer was high and the winds moderate from the Northward or North-Westward. By November 1st a large depression had arrived off the north of Scotland, and the winds over our Islands had backed to the Westward, and from this time until the period drew towards its close the conditions were cyclonic of a westerly type. At the end of the week, however, a new anticyclone was appearing in the west, the wind had veered to the Northward, and, although moderate to fresh in force generally, it blew with the force of a gale at some of the Scotch stations.

* The corresponding value in last week's report should read "−738."

† This value has been altered owing to the receipt of further information for a preceding week.

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II.—DATA from which the SUMMARY on page 259 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°				Inches	Inches.				
0. SCOTLAND, N.	Sumburgh Head	47	31	42·0	33·7	37·9	− 5·4	0	29	3	1·67	+0·70	*	*	*	*
	Stornoway	46	30	42·9	33·6	38·3	− 5·0	3	30	7	1·63	+0·57	15·2	+ 1·1	25	+ 1
	Wick	47	30	42·6	33·1	37·9	− 5·2	2	32	7	2·07	+1·37	*	*	*	*
	Lairg ℌ	45	29	41·6	32·1	36·9	− 5·4	0	36	7	0·83	−0·07	*	*	*	
	Glencarron ℌ	44	28	41·5	32·7	37·1	− 5·1	0	34	7	2·50	+0·25	*	*	*	*
	Fort Augustus ℌ	46	30	43·3	33·6	38·5	− 4·5	4	31	6	1·39	+0·46	11·1	?	18	?
	Fort William ℌ	47	33	43·4	35·7	39·6	− 4·4	4	23	6	2·00	+0·18	12·7	?	20	?
1. SCOTLAND, E.	Nairn	44	30	41·9	33·6	37·8	− 5·2	0	29	6	0·79	+0·29	*	*	*	*
	Aberdeen	49	31	43·3	33·6	38·5	− 5·2	4	31	5	0·57	−0·15	41·8	+24·7	67	+40
	Braemar ℌ	41	29	38·3	31·4	34·9	− 5·3	0	50	5	0·56	−0·34	14·7†	?†	24†	?†
	Ochtertyre ℌ	48	25	45·7	30·6	38·2	− 4·5	10	43	4	0·89	−0·13	*	*	*	*
	Leith	49	28	47·0	34·0	40·5	− 4·5	14	32	5	1·00	+0·50	*	*	*	*
	Marchmont ℌ	51	29	45·8	32·1	39·0	− 3·5	11	38	3	0·61	−0·22	24·8	?	39	?
2. ENGLAND, N.E.	Alnwick Castle	53	29	44·7	33·7	39·2	− 5·2	8	31	5	0·32	−0·44	*	*	*	*
	Durham	55	25	48·6	31·3	40·0	− 3·8	18	42	4	0·14	−0·51	30·2	+14·2	47	+22
	Shields	56	29	48·4	35·1	41·8	− 3·0	18	29	2	0·17	−0·38	*	*	*	*
	Scarborough ℌ	54	28	48·0	34·4	41·2	− 4·4	17	31	5	0·77	+0·07	*	*	*	*
	York	57	27	48·6	35·4	42·0	− 2·5	18	18	2	0·18	−0·42	25·0	+ 9·8	38	+16
	Spurn Head	54	34	47·7	39·1	43·4	− 2·7	22	8	6	0·55	+0·02	*	*	*	*
3. ENGLAND, E.	Hillington ℌ	58	25	50·1	34·5	42·3	− 2·7	34	21	3	0·27	−0·36	18·2	+ 1·7	28	+ 2
	Yarmouth	54	30	48·1	36·6	42·4	− 3·6	25	15	5	0·61	−0·10	*	*	*	*
	Geldeston	57	27	51·8	34·9	43·4	− 2·4	40	20	6	0·33	−0·27	16·8	− 3·2	25	− 5
	Cambridge	61	26	51·9	34·7	43·3	− 1·6	40	20	4	0·16	−0·34	21·7	+ 2·7	33	+ 3
	Rothamsted	59	26	50·7	35·5	43·1	− 1·1	35	18	2	0·29	−0·35	21·5	?	33	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	59	24	50·1	32·0	41·1	− 3·2	23	41	2	0·23	−0·31	*	*	*	*
	Loughborough	63	24	50·7	35·1	42·9	− 1·7	35	19	4	0·21	−0·36	*	*	*	*
	Stamford (Ketton Hall)	60	25	50·7	35·3	43·0	− 1·7	35	19	4	0·25	−0·38	*	*	*	*
	Cheadle ℌ	58	26	49·6	33·8	41·7	− 1·6	21	34	3	0·24	−0·57	*	*	*	*
	Churchstoke ℌ	56	25	50·3	32·9	41·6	− 2·4	23	38	5	0·41	−0·39	17·4	+ 2·0	27	+ 3
	Hereford ℌ	60	22	51·4	36·5	44·0	− 1·1	37	15	6	0·14	−0·46	*	*	*	*
	Cirencester	58	21	50·3	35·5	42·9	− 1·1	34	18	4	0·33	−0·35	19·0	+ 1·6	29	+ 2
	Oxford	60	27	51·6	37·7	44·7	− 0·4	37	12	3	0·18	−0·34	21·7	+ 3·5	33	+ 6
5. ENGLAND, S.	London	59	27	52·0	38·3	45·2	− 0·9	38	10	3	0·36	−0·16	17·5†	+ 4·5†	27†	+ 7†
	North Foreland	58	31	52·1	39·4	45·8	− 1·0	38	7	4	0·31	?	*	*	*	*
	Strathfield Turgiss ℌ	61	23	51·7	36·6	44·2	− 0·9	38	15	4	0·27	−0·31	*	*	*	*
	Dungeness	59	28	53·1	38·9	46·0	− 1·7	41	9	3	0·39	−0·41	*	*	*	*
	Hastings (St. Leonards)	57	31	51·1	39·5	45·3	− 2·4	34	7	3	0·56	−0·25	20·1	− 1·4	30	− 2
	Southampton	63	27	55·4	39·7	47·6	+ 0·6	49	6	3	0·33	−0·36	22·4	+ 2·8	33	+5
	Hurst Castle	59	29	55·6	42·3	49·0	+ 1·0	49	0	3	0·33	−0·39	*	*	*	*
	Stowell ℌ	59	24	52·6	39·6	46·1	+ 1·1	39	7	4	0·59	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	58	32	46·8	35·2	41·0	− 3·2	13	27	7	1·39	−0·55	*	*	*	*
	Glasgow	47	29	43·7	34·1	38·9	− 4·9	5	29	6	2·43	+1·55	23·4	+13·7	37	+22
	Ardrossan	53	31	49·0	37·0	43·0	− 2·6	28	14	6	0·99	+0·09	*	*	*	*
	Glenlee ℌ	55	25	48·1	32·4	40·3	− 2·7	17	38	6	1·86	+0·52	*	*	*	*
	Douglas (Isle of Man)	55	28	50·2	35·1	42·7	− 3·2	34	19	6	0·50	−0·52	29·4	+11·4	45	+18
7. ENGLAND, N.W.	Stonyhurst	52	29	45·9	34·4	40·2	− 4·6	11	30	5	0·91	−0·19	22·8	+ 9·4	35	+14
	Blackpool ℌ	55	28	51·9	37·6	44·8	− 0·7	38	12	6	0·57	−0·29	24·1	+10·1	37	+15
	Manchester	56	30	49·4	36·0	42·7	− 1·9	30	17	5	0·72	−0·20	9·5†	?	15†	?
	Liverpool Obsy. (Bidston)	58	33	49·4	40·0	44·7	− 1·3	27	6	4	0·49	−0·25	*	*	*	*
	Llandudno ℌ	57	32	51·4	38·6	45·0	− 2·5	35	10	7	0·83	+0·03	19·0	+ 5·7	29	+ 8
	Holyhead	57	36	51·4	43·4	47·4	− 0·8	38	0	6	0·53	−0·45	*	*	*	*
8. ENGLAND, S.W.	Llandovery	57	21	51·7	35·9	43·8	− 1·7	38	17	5	0·52	−0·73	*	*	*	*
	Pembroke	58	37	53·4	46·0	49·7	+ 0·8	54	0	5	0·55	−0·34	12·8	− 4·9	19	− 9
	Bristol (Montpelier)	56	28	52·5	39·6	46·1	+ 0·3	39	7	4	0·67	?	*	*	*	*
	Arlington (N. Devon)	55	27	51·9	39·7	45·8	− 0·2	36	6	6	1·61	+0·15	*	*	*	*
	Cullompton ℌ	59	23	54·6	38·0	46·3	− 0·2	47	11	6	0·86	+0·08	17·2	+ 1·3	26	+ 3
	Falmouth	58	35	53·7	44·4	49·1	− 0·3	50	0	3	0·18	−1·08	21·4	− 0·7	32	0
	Plymouth	58	29	53·8	42·6	48·2	− 0·2	43	0	2	0·13	−0·80	14·3	− 3·6	21	− 6
	Prawle Point	57	33	54·4	43·4	48·9	+ 0·3	48	0	5	0·39	−0·41	*	*	*	*
9. IRELAND, N.	Malin Head	53	37	48·1	40·9	44·5	− 0·4	22	3	7	0·84	?	*	*	*	*
	Londonderry	55	32	49·8	36·9	43·4	− 1·7	31	14	7	1·38	+0·40	*	*	*	*
	Edenfel (Omagh)	54	28	48·1	35·0	41·6	− 2·1	17	29	7	0·72	−0·10	*	*	*	*
	Belmullet	56	37	51·7	41·7	46·7	− 1·6	34	1	7	1·08	?	*	*	*	*
	Markree Castle	56	25	49·7	34·4	42·1	− 2·7	33	21	7	1·23	+0·33	20·5	+ 4·3	32	+ 8
	Brookeborough	55	28	50·5	34·3	42·4	− 1·1	35	22	7	0·75	−0·21	*	*	*	*
	Armagh	55	29	49·5	35·5	42·5	− 1·6	31	18	6	0·33	−0·32	22·1	+ 7·3	34	+11
	Donaghadee	57	35	49·9	39·4	44·7	− 1·2	30	7	7	0·27	−0·48	*	*	*	*
	Edgeworthstown	53	29	48·5	34·9	41·7	− 2·6	18	29	5	0·46	−0·28	*	*	*	*
10. IRELAND, S.	Dublin	58	32	50·4	38·7	44·6	− 2·2	32	9	4	0·27	−0·37	19·5	+ 0·3	30	0
	Parsonstown	56	25	50·1	35·6	42·9	− 2·2	33	18	4	0·54	−0·14	21·9	+ 4·6	34	+ 7
	Kilkenny	61	28	52·4	37·9	45·2	− 1·0	40	11	4	0·29	−0·39	*	*	*	*
	Waterford	59	28	52·3	38·4	45·4	− 2·7	39	10	4	0·27	−0·58	*	*	*	*
	Roche's Point	58	34	53·4	44·0	48·7	+ 0·1	47	0	3	0·05	−0·92	*	*	*	*
	Valencia	57	35	53·7	45·1	49·4	+ 0·2	52	0	7	0·60	−0·78	12·6	− 6·4	19	− 8
	Killarney	61	28	54·6	40·3	47·5	0·0	46	5	6	0·60	?	*	*	*	*
	Foynes	58	31	51·7	40·6	46·2	+ 0·4	35	4	5	1·07	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	58	41	55·0	47·9	51·5	+ 0·5	67	0	4	0·14	−0·74	*	*	*	*
	Jersey	60	32	56·0	45·9	51·0	+ 1·0	63	0	6	0·95	−0·10	18·8	− 3·7	28	− 3

Stations marked ℌ are in connection with the Royal Meteorological Society, and those marked ℌ with the Scottish Meteorological Society.

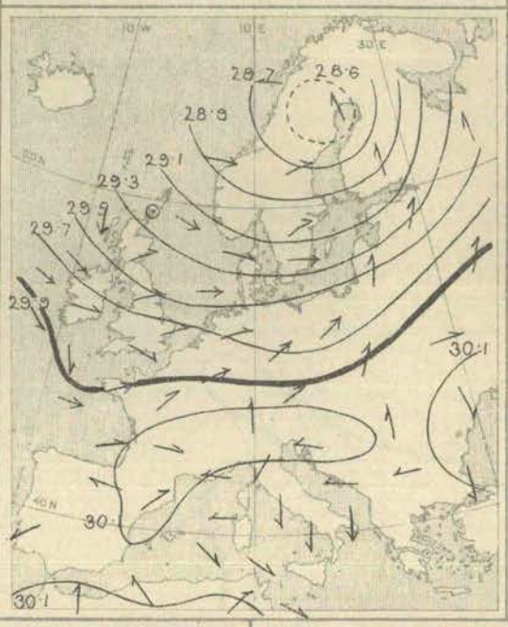
* An asterisk is inserted in all places for which the information is not usually received.

† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row) at the Kew Observatory, and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

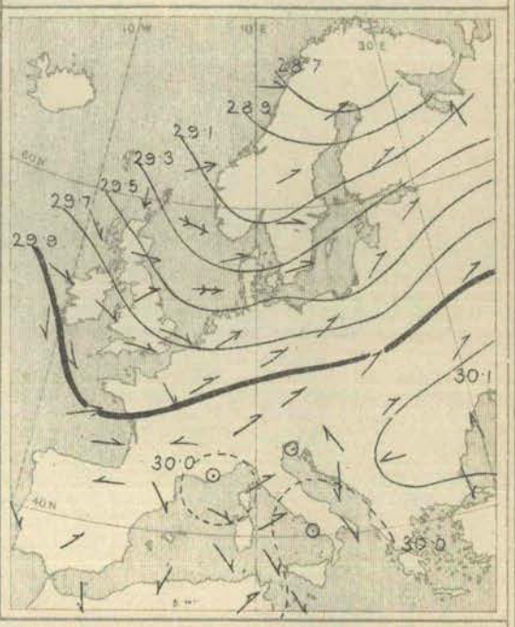
Sunday, 29th October.

Temperature and Weather. 8 a.m.

Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fine in the eastern parts of Great Britain, but cloudy in the west and north of our Islands, with hail showers on our extreme north-west coasts. Fine and bright over southern and south-eastern Europe generally, as well as in Sweden and Denmark; cloudy in other parts of the Continent, with rain over Belgium, north Germany, and the Gulf of Finland. Fog reported at some of the Austrian stations. Slight showers occurring during day in many parts of our Islands, and considerable quantities of rain over the Channel Islands and the north of France.

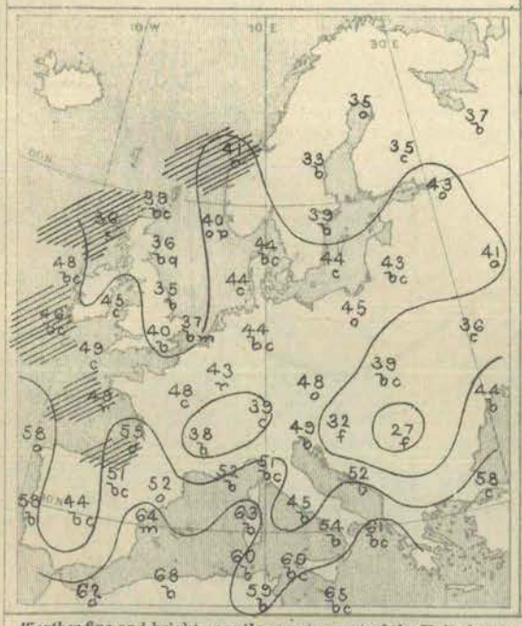
Temperature fallen in most places. Morning readings highest, 69° at Malta, 65° at Barcelona and Algiers, 64° at Brindisi, and 63° at Oran; above 55° at some of the English Channel stations. Lowest, (1) 32° at Bodö, 33° at Archangel, and 36° at Uleaborg and Hernösand; (2) 35° at Sumburgh Head, 39° at Stornoway and Nairn, and 41° at Leith. Remaining below 45° all day in the north of Scotland, but rising to between 55° and 59° at most of our southern stations, exceeding 60° in the west and south of France, and exceeding 70° over the southern parts of Spain and Italy.

Wind fresh or strong from the North-Westward on our western coasts, but moderate from West or South-West in the east. Strong to a gale from the Westward or South-Westward over north Germany, the Baltic, and the southern parts of Scandinavia; moderate to strong from the Southward over the north of Russia. Light and variable over Austria and the south of Russia; Northerly in Italy; North-Easterly in Spain; South-Easterly in Algeria. Moderating later on our western coasts, and also over the Baltic.

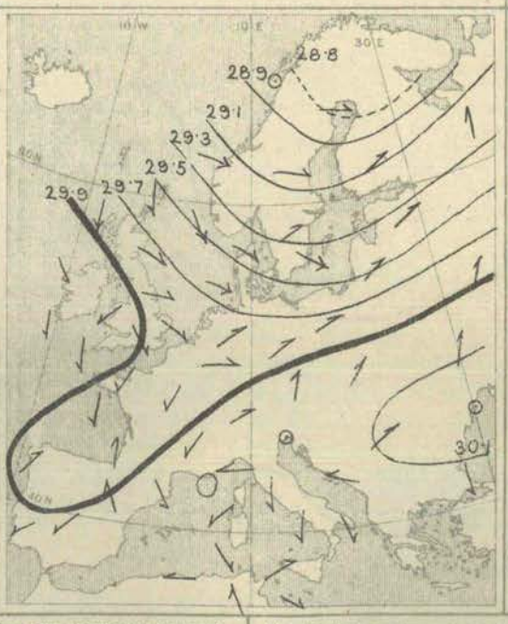
Barometer highest, 30·1 ins. to 30·2 ins. over the south of Russia, and also over the southern parts of France and Germany. Lowest, 28·6 ins. and less in a well-marked depression over the north of Sweden; secondary disturbances passing eastwards over our Islands and the North Sea, and gradients steep over all the more northern parts of Europe. Barometer rising later on all our western and northern coasts, and anticyclone appearing off the south-west of Ireland. Swedish depression moving northwards.

Monday, 30th October.

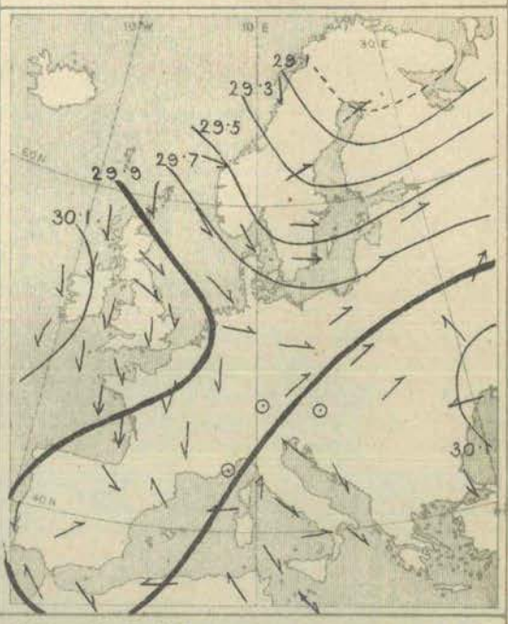
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fine and bright over the greater part of the United Kingdom, but showery in the north of Scotland and the south of Ireland, with snow in the former locality, fine over southern and south-eastern Europe, as well as in Sweden; cloudy or overcast in most other parts of the Continent, with rain in Belgium and the north of France. Showers falling during day at several of our western, southern, and extreme northern stations, as well as in France, and heavy rain in the north of Spain; thunder and lightning observed in evening or night over the south of England.

Temperature fallen generally; morning readings highest, 68° at Algiers, 65° at Malta, 64° at Barcelona, and 62° at Oran; above 50° in most parts of southern Europe, but very little above 40° over central Spain and northern Italy. Lowest, (1) 30° at York, 32° at Loughborough and Parsonstown, and 34° at Leith; (2) 27° at Hermanstadt, 30° at Kharkov, and 32° at Vienna and Nicolaieff; (3) 33° at Hernösand. Daily maxima over our Islands below 50° at all but the south-western stations, and below 45° in the north of Scotland. Thermometer exceeding 60° in the west and south of France, and exceeding 70° in Spain and Sicily. Sharp frost occurring over the United Kingdom at night.

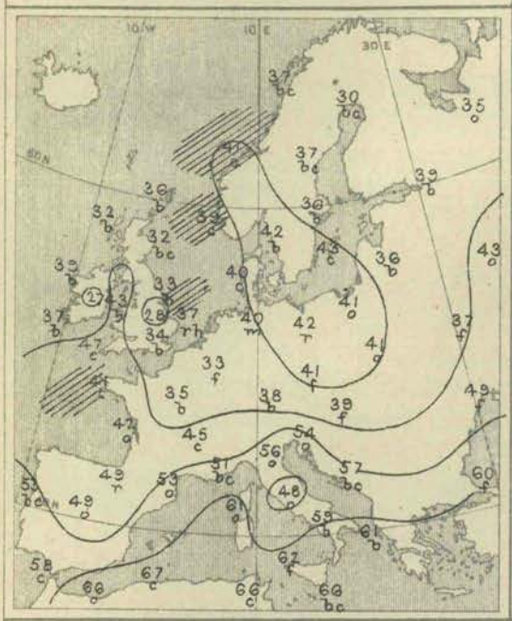
Wind light to moderate from the Northward or North-Westward over our Islands, strong from North-West or West over Denmark and the southern parts of Scandinavia; light to fresh from the South-Westward over Germany and the greater part of Russia. Light from the Northward in Italy and from the North-Eastward in Spain, but Southerly in the west of France, and variable in the south of that country. Subsequently veering more to the Northward in our Islands, and shifting to the same quarter in the west and north of France.

Barometer highest, 30·2 ins. and upwards in an anticyclone over the south of Russia; 30·0 ins. and upwards in another system spreading over the south of Ireland from the Atlantic. Lowest, 28·8 ins. and less in a depression over Lapland; gradients rather steep over northern Europe generally. Western anticyclone subsequently spreading north-eastwards, and barometer rising in all parts of our Islands. Barometer rising in nearly all parts of western and northern Europe.

Tuesday, 31st October.

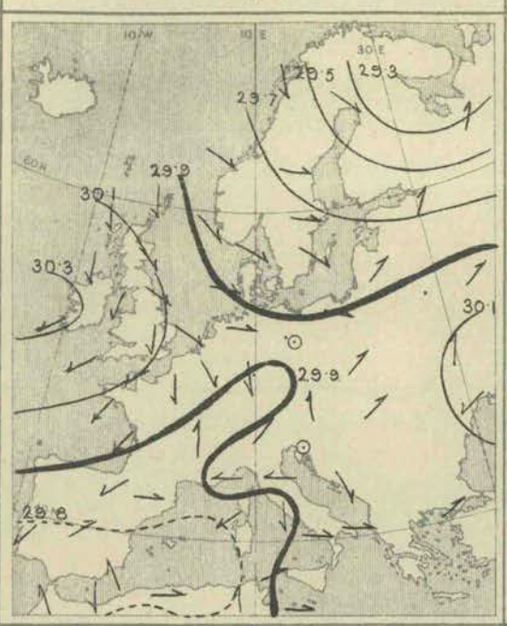
Temperature and Weather.

8 a.m.

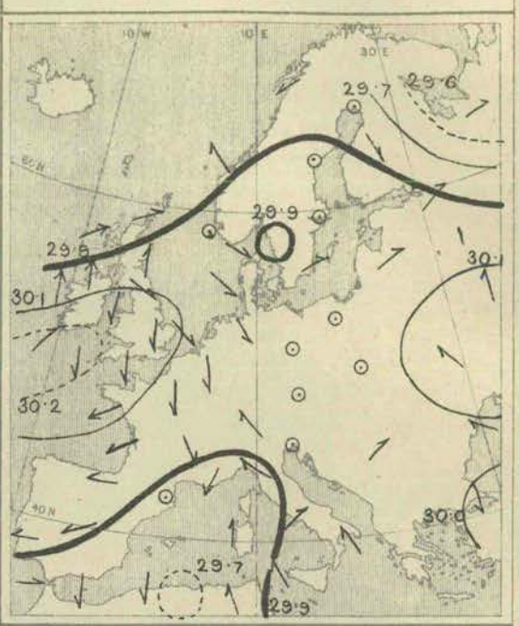


Barometer and Wind.

8 a.m.



6 p.m.



Weather fine and bright over the United Kingdom generally, but showers of snow or hail reported at one or two of our northern and eastern stations. Fine in Sweden, Finland, the Netherlands, the north of France, and south of Italy, but cloudy in most other parts of the Continent, with fog in the south of Russia, and with rain at Christiansund, and also at Berlin and Biarritz. Rain falling later in most parts of Ireland and Scotland—heavily in the Shetlands and Hebrides; thunder and lightning occurring at Scilly. Large quantities of rain reported over the south of France and northern Italy.

Temperature fallen generally. Morning readings highest, 67° at Algiers, and 66° at Oran, La Calle, Tunis, and Malta; above 50° in most of the southern countries. Lowest, (1) 27° at Parsonstown, 28° at Loughborough, 29° at Oxford, and 30° at York; (2) 30° at Haparanda, 32° at Uleaborg, and 35° at Archangel. Below 40° in most parts of northern and north-western Europe. Remaining below 45° all day at many of our own northern, eastern, and south-eastern stations, but exceeding 50° on our south-west coasts. Exceeding 60° over southern Europe generally, and reaching 70° or more in Sicily and the south of Spain. Sharp frost occurring over the inland parts of England and France at night.

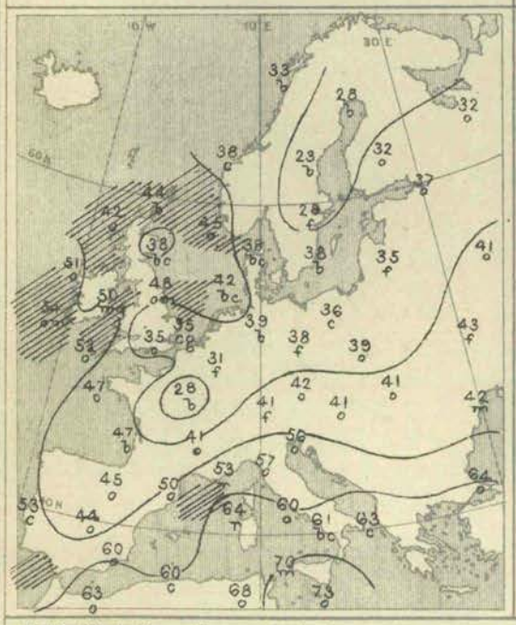
Wind light from the North-Westward over the North Sea and the northern and eastern parts of Great Britain, but Northerly or North-Easterly over France, Spain, and the west and south of our Islands. Light from the Westward in Sweden and Denmark, and from the South-Westward over the greater part of Russia, but variable in Germany and also over the south of France and northern Italy. Westerly in the south of Italy, variable in Algeria. Subsequently backing to the South-Westward on our western and northern coasts, and increasing at night to a fresh or strong gale in Scotland.

Barometer highest, 30·1 ins. to 30·3 ins. in an anticyclone lying over and to the westward of our Islands, and also in another system lying over the southern parts of Russia. Lowest, 29·3 ins. and less in a depression over Lapland; 29·8 ins. and less in a large shallow area over Spain and the western parts of the Mediterranean. Large depression beginning to advance later from the Atlantic towards our extreme northern coasts, and barometer falling quickly in Scotland and the north of Ireland.

Wednesday, 1st November.

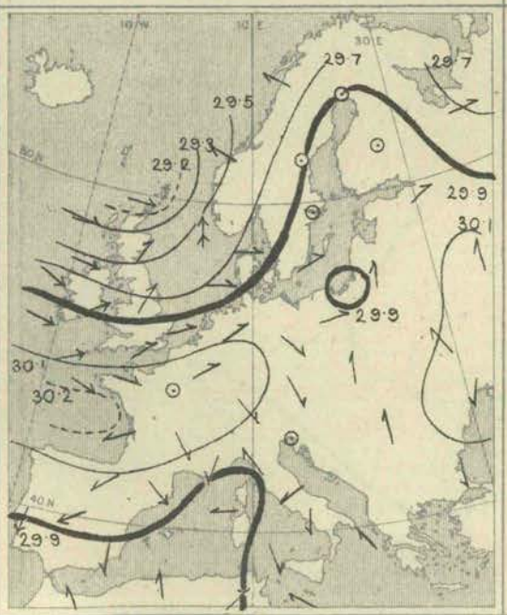
Temperature and Weather.

8 a.m.

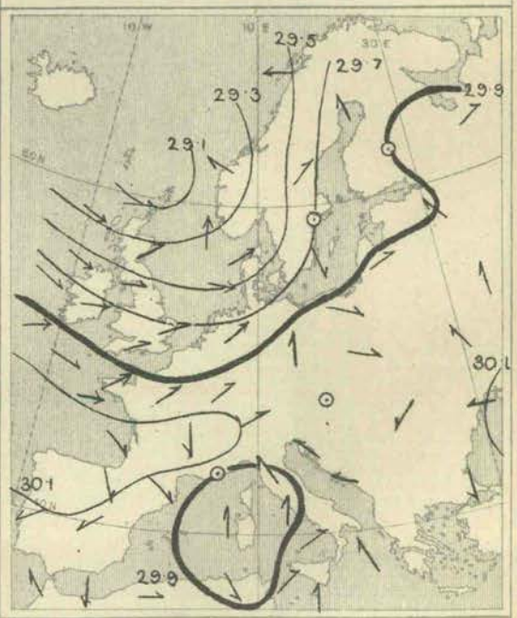


Barometer and Wind.

8 a.m.



6 p.m.



Weather fine in the north-east of Scotland, as well as at some of our extreme southern stations, but dull in other parts of the United Kingdom, with showers in the north-west. Cloudy or overcast in most of the Continental countries, with fog in places, and with rain at Memel, Florence, and Barcelona. Fine in Sweden, Denmark, and the northern parts of France. Rain falling later in nearly all parts of our Islands and the Continent—amounts large over northern Italy.

Temperature fallen over northern and central Europe, but risen elsewhere—quickly over the United Kingdom. Morning readings highest, 77° at Sfax, 73° at Malta, 70° at Palermo, and 68° at La Calle and Tunis; above 55° at the Mediterranean and Adriatic stations generally, and above 50° on our own western coasts. Lowest, (1) 23° at Hernösand, 28° at Haparanda, and 29° at Helsingfors; (2) 28° at Paris, 29° at Münster, and 31° at Brussels; (3) 32° at Dungeness, and 34° at Cambridge. Rising during day to 50° or more in several parts of Ireland, England, and France, and exceeding 55° on our south-west coasts. Exceeding 60° over southern Europe generally, and exceeding 70° in Sicily and the south of Spain.

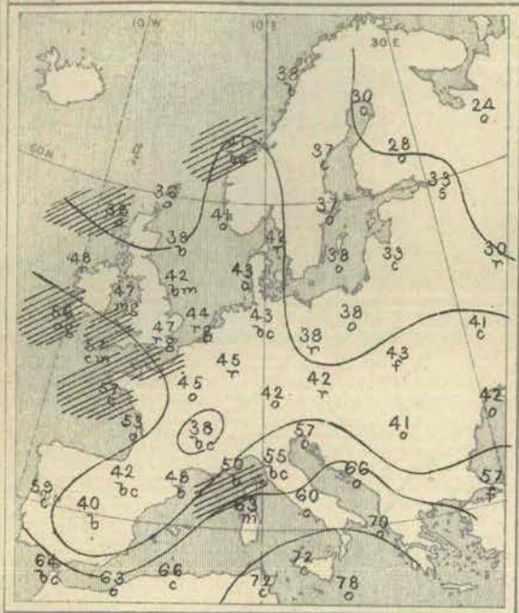
Wind fresh or strong from the Westward on our western coasts, moderate from the South-Westward in the east and south of our Islands, and also over the Netherlands; Southerly or South-Easterly in the west of Norway, with a gale at Skudesnaes. Calm in Sweden; variable in Russia, North-Westerly in Germany, North-Easterly in Spain and the south of France. Variable in Italy and Algeria. Subsequently increasing to a moderate gale from the Westward at some of the Channel stations, and to a fresh gale from South-West at the Helder.

Barometer highest, 30·1 ins. to 30·2 ins. in an anticyclone spreading from the Atlantic over the Bay of Biscay and France, and also in another system over the southern parts of Russia. Lowest, 29·2 ins. and less in a depression lying off the north of Scotland; gradients rather steep over our Islands and the North Sea. Depression subsequently moving north-eastwards, but small secondary systems travelling eastwards across the United Kingdom.

Thursday, 2nd November.

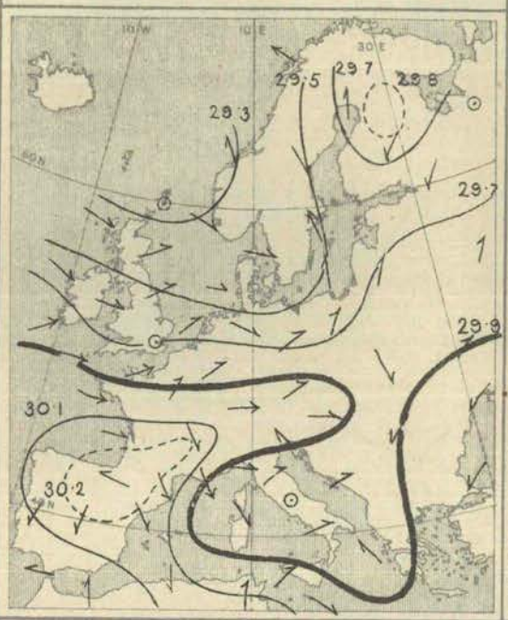
Temperature and Weather.

8 a.m.

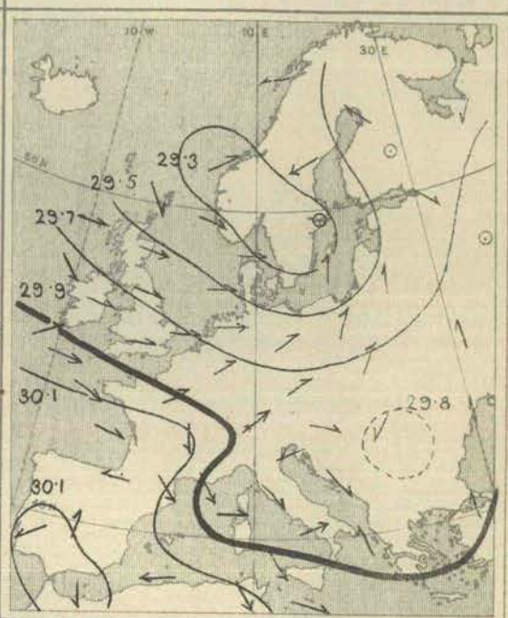


Barometer and Wind.

8 a.m.



6 p.m.



Weather dull and rainy over the greater part of Ireland, England, the Netherlands, and Germany, but fine at many of the Scotch stations, as well as in the west of Norway. Fine also over Spain and the south of France, but cloudy or overcast in Italy, Austria, and Russia, with snow at St. Petersburg. Some improvement taking place later over Ireland and England, but sky remaining cloudy. Rain falling at many of the Continental stations, and a thunderstorm occurring at Farö.

Temperature fallen in the west and north of our Islands, as well as in Russia and the southern parts of France, risen in most other countries. Morning readings highest, 78° at Malta, 72° at Palermo and Tunis, and 70° at Brindisi; above 60° at several of the Mediterranean and Adriatic stations, and above 55° on our own extreme south-west coasts. Lowest, 24° at Archangel, 28° at Kuopio, 29° at Uleaborg, and 30° at Moscow; below 40° over the northern parts of Scotland. Rising during day to 50° or more at several of the English and Irish stations, and reaching 60° at Jersey. Exceeding 60° over southern Europe generally, and exceeding 70° over the southern parts of Spain and Italy.

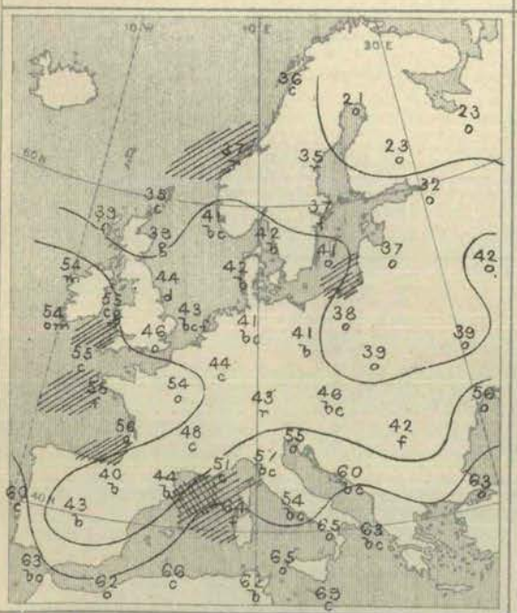
Wind Westerly or South-Westerly over our Islands, Denmark, Germany, the Netherlands, and the northern parts of France; light or moderate in force generally, but strong in the English Channel and the south of Ireland. Light from the Southward in Sweden, eastern Germany, and the southern parts of Russia; South-Easterly in the west of Norway. Variable in Italy and Algeria, North-Westerly in the south of France; North-Easterly or Easterly in Spain. Wind veering to the Westward or North-Westward later in all parts of the United Kingdom, and subsiding at the Channel stations; no important change occurring elsewhere.

Barometer highest, 30·2 ins. and upwards in another system over the Black Sea and its immediate neighbourhood. Lowest, 29·2 ins. and less in a depression lying to the westward of Norway; small secondary systems observed over various parts of our Islands. Depressions moving eastwards later, and barometer rising decidedly over the United Kingdom.

Friday, 3rd November.

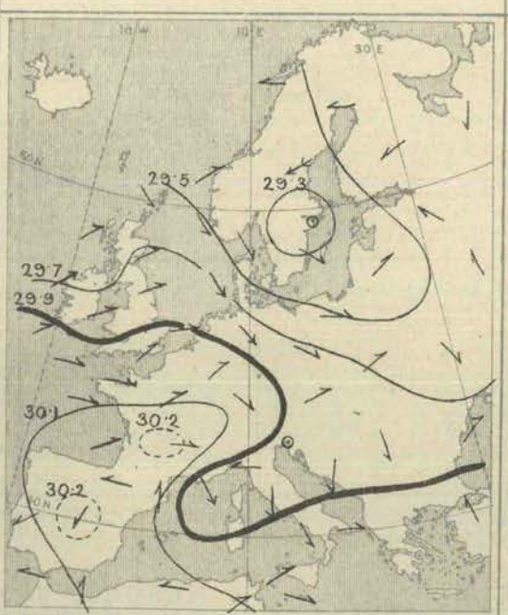
Temperature and Weather.

8 a.m.

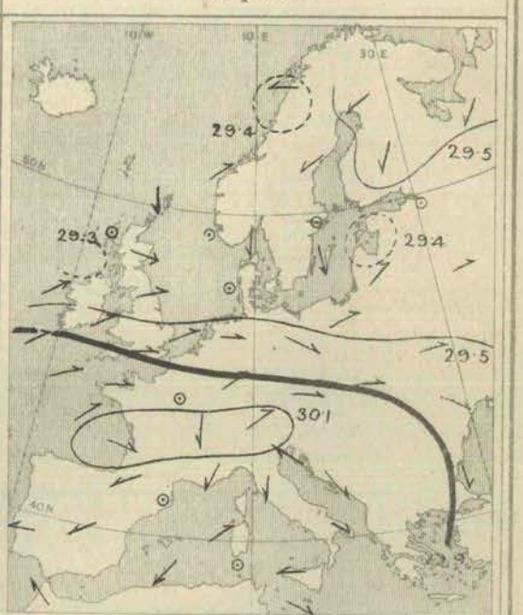


Barometer and Wind.

8 a.m.



6 p.m.



Weather dull and unsettled over the greater part of our Islands, with rain at several of the western and northern stations. Fine on the south-east coasts of England, as well as in Denmark, the south of Norway, and in isolated parts of southern Europe; cloudy over the Continent generally, with rain at some of the Scandinavian and German stations, and with snow at St. Petersburg. Rain falling later in all the more western parts of the United Kingdom, and snow showers in the north of Scotland and in Norway and Sweden.

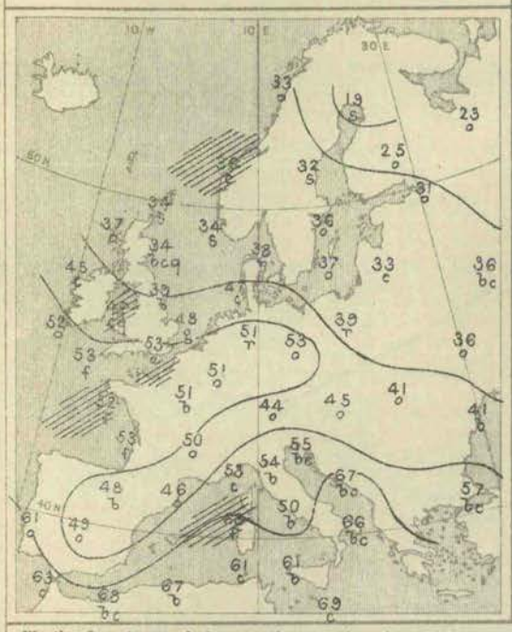
Temperature risen in most of the western countries, but changed irregularly elsewhere. Morning readings highest, 69° at Malta, 68° at Sfax, 66° at Algiers, and 65° at Naples and Palermo; reaching 55° or more on some parts of our own south-western coasts. Lowest, 17° at Uleaborg, 21° at Haparanda, 23° at Archangel and Kuopio, and 32° at St. Petersburg. Daily maxima below 45° at most of the Scotch stations, but exceeding 55° over England and Ireland generally, and exceeding 60° at some of the central English stations, as well as in the west and south of France. Maxima ranging between 66° and 77° reported from some of the Mediterranean stations. Frost occurring over Scotland at night.

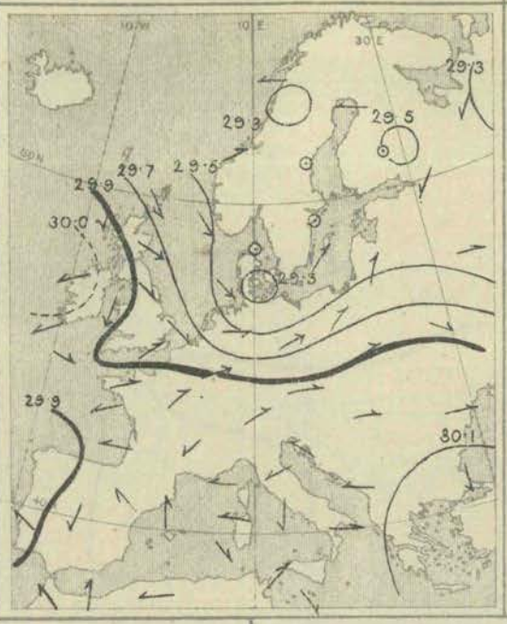
Wind South-Westerly or Westerly over the greater part of our Islands, the Netherlands, and the north of France; light or moderate in force generally, but strong in the west of Ireland. North-Westerly over Denmark, Germany, Austria, and Italy; Southerly over the greater part of Russia; Easterly or North-Easterly over the northern parts of Scandinavia, with a gale at Hernösand. Variable over the southern parts of France, North-Easterly in Spain. No important change occurring over western Europe later.

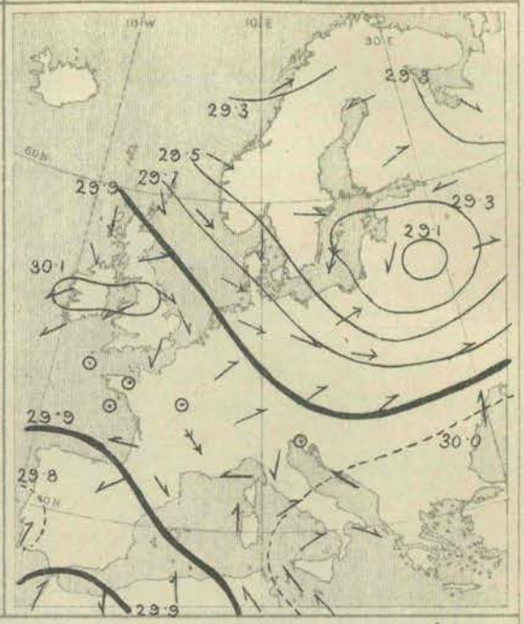
Barometer highest, 30·1 ins. to 30·25 ins. in an anticyclone lying over the Bay of Biscay, France, Spain, and Algeria. Lowest, 29·3 ins. and less in a well-marked depression over the south of Sweden; 29·4 ins. and less in another disturbance off the west of Norway; 29·6 ins. and less in a third system off the west of Scotland. Fresh disturbance forming later off the north-east coasts of Great Britain, and barometer falling over western Europe generally.

Saturday, 4th November.

Temperature and Weather.	Barometer and Wind.	
8 a.m.	8 a.m.	6 p.m.







Weather fine at several of our northern stations, but dull in the extreme north of Scotland, with snow at Sumburgh Head; dull over the more southern parts of the United Kingdom, with showers in places. Fog reported at the mouth of the Channel and also in the west of France. Cloudy at most of the Continental stations, with rain in Denmark and north Germany, and with snow at Haparanda, Hernösand, and Skudesnaes. Fine in Italy, Austria, and the extreme south of Russia. A little rain falling later over the south of England generally, and large quantities reported at night over the north of Scotland.

Temperature fallen in all but the central parts of Europe. Morning readings highest, 69° at Malta, 63° at Oran, and 67° at Algiers; above 60° at several of the Mediterranean stations, and above 50° in the south of England. Lowest, (1) 19° at Haparanda, 22° at Uleaborg, and 23° at Archangel; (2) 34° at Sumburgh Head, Wick, Nairn, and Aberdeen, below 40° over the northern parts of our Islands generally. Daily maxima below 45° at most of our northern stations, but ranging between 55° and 59° in the extreme south; exceeding 60° in the west and south of France, and exceeding 70° over the southern parts of Spain and Italy. Sharp frost occurring over the central parts of England and Ireland at night.

Wind Northerly (North-West to North-East) over all the more northern parts of our Islands, but Westerly or South-Westerly in the south of England, as well as over the Netherlands, Denmark, and Poland; light from the Eastward or North-Eastward over the northern parts of Scandinavia and Russia. Easterly over Spain and the west and south of France, variable in Italy; South-Easterly in Algeria. Subsequently shifting to the North-Eastward in the south of England, and to the North-Westward in Germany; North-Easterly gale springing up at Wisby.

Barometer highest, 30·1 ins. and upwards over south-eastern Europe; 30·0 ins. and upwards over all the more southern countries, as well as in the north of Ireland. Lowest, 29·3 ins. and less in three depressions—one lying over the north of Scandinavia, another over the north of Russia, and the third (a well-defined system) over Denmark. Last-mentioned disturbance subsequently moving eastwards to the Baltic Provinces; new depression appearing over the north of Scotland at night.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force is indicated thus: ⇛ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ⊙ = a calm. In the left-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Germany, Sweden, and Norway, and 7 a.m. in France, Algeria, Italy, Austria, and Russia; that for 6 p.m. is prepared from observations made at 6 p.m. in the British Islands and France, 7 p.m. in Algeria, 8 p.m. in Sweden and Norway, Germany, and Austria, and 9 p.m. in Russia, Belgium, and Italy. The time indicated in each case is the standard time for each country.

GENERAL NOTES.

During the early part of the week two anticyclonic systems were observed over Europe—one over the south of Russia and the other over our Islands and the adjacent parts of the Atlantic. In the more western countries the prevailing winds were, therefore, Northerly, with low temperatures, and with occasional showers in many districts. Towards the middle of the week the two anticyclones moved southwards, and for the remainder of the time the weather over the northern half of Europe was affected by large depressions which appeared in the first place off the north of our Islands, and which ultimately spread southward and south-eastward. Westerly winds, therefore, set in over all but the eastern and southern countries, and occasionally blew with considerable strength in our Islands, with mild changeable weather. Over southern Europe the winds were rather variable and the weather fair. At the close of the period the depressions were moving away to the eastward, and a new anticyclone was spreading over the United Kingdom from the Atlantic.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 260.

Stations.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	Stations.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	29·1	?	46	?	EASTBOURNE	16·4	?	24	?
OSWALDKIRK (Yorkshire)	25·7	?	39	?	TENBY	15·5*	?	22*	?
WORKSOP	19·8	+ 4·6	30	+ 6	NEWQUAY	14·0	?	21	?
THURCASTON (Leicestershire)	22·0	+ 6·3	34	+10	TORQUAY	19·6*	?	29*	?
MARGATE	19·1	?	29	?	ARLEY COTTAGE (County Cavan)	20·7	?	32	?
WESTBOURNE (Sussex)	18·0*	?	27*	?	GUERNSEY	16·1*	?	24*	?
BRIGHTON	17·2	?	26	?					

* The values at Westbourne, Tenby, Torquay and Guernsey are obtained by Jordan's Photographic Recorder.

NOTICE.

WEEKLY WEATHER REPORT, 1892.

This is now complete, all the Numbers, two Appendices, the Supplements, and Title Page having been issued. The Volume may now be bound.

WEEKLY WEATHER REPORT, 1893.

All Numbers have been issued to date.

Appendix I.—Parts 1, 2, 3, are issued.

Supplement.—Summary for January will be issued in a day or two; that for February is in proof; the later numbers are in hand.

Jones & Co. 5th Lon. 63, Carter Lane

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; R. H. SCOTT, F.R.S., SECRETARY.

By whom Subscriptions, payable in advance, can be received.

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VOL. X. No. 45.] *Third Series.* WEEK ENDING SATURDAY, 11TH NOVEMBER, 1893. [*Price 6d.* *Annual Subscription, post paid*, £1 10s. 0d.

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871-90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the twenty-five years 1866-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the ten years 1881-90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

	DISTRICTS. (See p. 266.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 1st, 1893. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	49	29	42·6	34·2	38·4	3 below.	2	−19	28	+15	2328	+514	553	− 40
	1. SCOTLAND, EAST	51	25	42·9	34·3	38·6	3 below.	3	−21	28	+11	2612	+315	634	+ 9
	2. ENGLAND, N.E.	50	26	46·2	37·4	41·8	2 below.	12	−15	19	+ 9	2884	+424	489	− 38
	3. ENGLAND, EAST	52	23	46·4	33·9	40·2	3 below.	12	−19	22	+20	3370	+523	577	− 26
	4. MIDLAND COUNTIES	51	19	45·4	32·6	39·0	4 below.	10	−20	35	+21	3448	+665	565	− 41
	5. ENGLAND, SOUTH	51	27	45·9	36·1	41·0	4 below.	11	−28	23	+15	3678	+586	404	− 38
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	50	23	44·4	33·6	39·1	4 below.	7	−20	32	+23	2847	+474	420	− 28
	7. ENGLAND, N.W.	51	26	46·1	37·1	41·6	3 below.	11	−20	20	+13	3318	+741	353	− 81
	8. ENGLAND, S.W.	53	22	46·0	35·7	40·9	5 below.	11	−31	25	+21	3584	+697	273	− 55
	9. IRELAND, NORTH	52	20	46·2	34·5	40·4	4 below.	12	−18	30	+21	3081	+552	312	− 75
	10. IRELAND, SOUTH	52	22	46·6	34·1	40·4	6 below.	13	−27	31	+24	3457	+594	220	− 76
	—CHANNEL ISLANDS	59	39	49·2	42·0	45·6	4 below.	25	−33	0	0	4139	+849	70	− 52

Rainfall.

	DISTRICTS. (See p. 266.)	For the Week. Number of Rainy Days.	Total Fall.	More or less than the mean for the Week.	From Jan. 1st, 1893. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.
			10ths of in.	10ths of ins.			Ins.	Ins.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	3	2	11 less.	211	+ 3	43·8	+ 2·6
	1. SCOTLAND, EAST	4	5	2 less.	166	− 5	22·8	− 4·6
	2. ENGLAND, N.E.	7	8	2 more.	143	−15	17·5	− 5·2
	3. ENGLAND, EAST	3	2	4 less.	141	−14	16·5	− 6·0
	4. MIDLAND COUNTIES	3	1	6 less.	135	−18	16·7	− 8·2
	5. ENGLAND, SOUTH	2	1	6 less.	134	−15	19·2	− 4·5
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	1	less than ½	13 less	169	−10	33·7*	− 8·7
	7. ENGLAND, N.W.	3	1	8 less.	157	− 9	25·7	− 4·5
	8. ENGLAND, S.W.	1	less than ½	10 less.	143	−29	26·9	− 7·5
	9. IRELAND, NORTH	1	less than ½	8 less.	181	−13	28·4	− 2·6
	10. IRELAND, SOUTH	2	1	8 less.	158	−20	25·8	− 7·5
	—CHANNEL ISLANDS	2	2	8 less.	152	−31	23·0	− 5·2

Bright Sunshine.

	DISTRICTS. (See p. 266.)	For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 1st, 1893. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	8	− 6	14	− 10	978	−133	24	− 3
	1. SCOTLAND, EAST	8	− 2	14	− 8	1326	+ 44	33	+ 1
	2. ENGLAND, N.E.	15	+ 3	25	+ 5	1496	+318	37	+ 8
	3. ENGLAND, EAST	29	+13	45	+ 20	1746	+308	43	+ 7
	4. MIDLAND COUNTIES	22	+ 8	34	+ 10	1648	+366	41	+ 9
	5. ENGLAND, SOUTH	24	+ 9	38	+ 13	1790	+337	45	+ 10
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	21	+ 9	35	+ 15	1483	+217	37	+ 6
	7. ENGLAND, N.W.	17	+ 7	28	+ 12	1450	+197	36	+ 5
	8. ENGLAND, S.W.	34	+21	53	+ 32	1869	+365	47	+ 10
	9. IRELAND, NORTH	26	+ 9	42	+ 15	1293	+131	32	+ 3
	10. IRELAND, SOUTH	24	+ 7	38	+ 12	1441	+ 88	36	+ 2
	—CHANNEL ISLANDS	26	+15	41	+ 24	2186	+421	55	+ 11

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather was mostly fair in the western parts of the United Kingdom, but changeable and snowery in the northern, eastern, and south-eastern districts. Snow or sleet was experienced in several of the more northern parts of Great Britain on the 5th and 6th, and thunder and lightning occurred at some of our southern and south-western stations on the 6th and 7th.

Temperature was below the mean, the deficit ranging between 2° and 3° in most of the northern districts, but amounting to 5° in England S.W., and to 6° in Ireland S. The absolute maxima were registered either at the beginning or the end of the week, but with the exception of the Channel Islands, where the thermometer rose to 59°, the highest readings were very little above 50°; in Scotland N. the thermometer did not exceed 49°. The lowest of the minima were recorded either on the 5th, 6th, or 7th, when sharp frost occurred in all districts excepting the Channel Islands. In the Midland Counties the sheltered thermometer fell as low as 19°, in Ireland N. to 20°, in England S.W. and Ireland S. to 22°, and in England E. and Scotland W. to 23°.

Rainfall amounted to considerably less than the mean in all districts excepting England N.E., where there was a slight excess. In Scotland W., England S.W., and Ireland N. the aggregate for the week amounted to less than half a tenth of an inch.

Bright Sunshine was in excess of the mean in all districts excepting Scotland N. and E.; in England E., England S.W., and the Channel Islands the excess was considerable. The percentage of the possible duration varied from 14 in Scotland N. and E., to 45 in England E., and to 53 in England S.W.

Barometer and Wind.—At the commencement of the week a small depression which had appeared over Scotland moved south-eastwards across the North Sea, the wind in its rear increasing to a gale from the Northward on our extreme northern coasts. A large anticyclone now spread over the northern parts of the United Kingdom from the Atlantic, and for the remainder of the time the winds over England and Ireland were North-Easterly and Easterly, while in Scotland they were variable or North-Westerly. On the 9th and 10th, when a large depression spread from the south-westward over Spain and the south of France, a considerable increase of wind took place on our west and south coasts, with a gale in the Channel.

* This value has been slightly altered owing to the receipt of further information for a preceding week.

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II.—DATA from which the SUMMARY on page 265 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°				Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	49	31	43·9	36·0	40·0	− 2·4	5	23	4	0·20	−0·77	*	*	*	*
	Stornoway	47	30	43·4	34·0	38·7	− 3·4	4	29	4	0·25	−0·83	5·7	−5·8	10	−10
	Wick	48	32	43·7	35·3	39·5	− 2·5	5	25	3	0·20	−0·50	*	*	*	*
	Lairg Ş	43	29	40·3	32·4	36·4	− 4·6	0	39	5	0·51	−0·39	*	*	*	*
	Glencarron Ş	45	29	41·9	32·9	37·4	− 3·6	0	32	2	0·08	−2·20	*	*	*	*
	Fort Augustus Ş	45	30	42·0	34·8	38·4	− 3·4	0	25	5	0·11	−0·87	1·3	?	2	?
	Fort William Ş	47	31	[illegible]	[illegible]	38·5	− 4·2	2	28	0	−	−1·82	18·2	?	31	?
1. SCOTLAND, E.	Nairn	45	31	42·4	34·9	38·7	− 3·0	1	25	3	0·16	−0·35	*	*	*	*
	Aberdeen	46	32	43·6	36·3	40·0	− 2·4	4	21	6	0·43	−0·30	10·6	− 4·4	18	− 8
	Braemar Ş	41	30	37·5	33·1	35·3	− 3·5	0	47	5	0·60	−0·30	2·5†	?†	4†	?†
	Ochtertyre Ş	51	27	46·1	31·0	38·6	− 2·7	11	42	0	−	−1·02	*	*	*	*
	Leith	47	33	45·3	36·1	40·7	− 3·0	9	23	2	0·09	−0·41	*	*	*	*
	Marchmont Ş	45	25	42·4	34·3	38·4	− 2·9	1	28	7	1·91	+1·07	12·8	?	22	?
2. ENGLAND, N.E.	Alnwick Castle	47	35	44·3	39·3	41·8	− 1·2	6	11	7	1·13	+0·35	*	*	*	*
	Durham	49	26	44·8	36·5	40·7	− 1·5	8	22	7	1·24	+0·58	14·2	− 0·3	24	0
	Shields	49	28	46·9	36·7	41·8	− 1·8	14	22	7	1·26	+0·68	*	*	*	*
	Scarborough Ⓜ	50	28	47·5	39·2	43·4	− 0·8	22	8	6	0·70	0·00	*	*	*	*
	York	50	26	46·9	33·7	40·3	− 2·8	14	32	6	0·18	−0·38	17·4	+ 5·4	29	+10
	Spurn Head	48	33	46·6	38·9	42·8	− 2·0	19	9	6	0·24	−0·31	*	*	*	*
3. ENGLAND, E.	Hillington Ⓜ	50	23	46·4	34·2	40·3	− 3·0	12	30	4	0·30	−0·32	25·7	+11·5	41	+17
	Yarmouth	49	30	45·9	37·0	41·5	− 3·2	11	21	5	0·27	−0·45	*	*	*	*
	Geldeston	51	27	46·8	35·9	41·4	− 3·0	13	25	5	0·45	−0·16	32·8	+15·3	52	+25
	Cambridge	52	24	47·9	30·1	39·0	− 4·3	17	46	1	0·04	−0·45	31·1	+14·2	49	+21
	Rothamsted	50	27	45·2	32·5	38·9	− 4·1	9	36	1	0·03	−0·61	24·6	?	39	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	48	31	45·7	35·6	40·7	− 2·3	10	25	5	0·16	−0·35	*	*	*	*
	Loughborough	49	19	46·4	29·7	38·1	− 5·1	12	46	3	0·04	−0·50	*	*	*	*
	Stamford (Ketton Hall)	49	21	46·7	32·4	39·6	− 3·6	13	37	5	0·23	−0·38	*	*	*	*
	Cheadle Ⓜ	47	28	44·0	33·0	38·5	− 3·5	6	33	3	0·05	−0·73	*	*	*	*
	Churchstoke Ⓜ	46	27	43·3	30·2	36·8	− 6·0	4	43	3	0·03	−0·79	11·8	− 1·7	19	− 3
	Hereford Ⓜ	48	25	45·7	33·1	39·4	− 4·6	10	34	1	0·01	−0·59	*	*	*	*
	Cirencester	48	29	44·6	33·4	39·0	− 3·7	7	32	1	0·01	−0·68	22·2	+14·7	46	+22
	Oxford	51	29	46·7	33·3	40·0	− 3·9	13	34	3	0·04	−0·49	28·2	+12·8	45	+21
5. ENGLAND, S.	London	50	32	46·0	36·4	41·2	− 3·7	11	22	1	0·01	−0·50	13·3†	+ 2·3†	21†	+ 4†
	North Foreland	49	34	47·1	37·7	42·4	− 3·0	21	12	3	0·40	?	*	*	*	*
	Strathfield Turgiss Ⓜ	50	27	44·9	34·1	39·5	− 4·3	8	30	0	−	−0·59	*	*	*	*
	Dungeness	51	31	47·0	38·1	42·6	− 3·6	21	11	4	0·40	−0·42	*	*	*	*
	Hastings (St. Leonards)	47	33	45·2	36·8	41·0	− 5·3	9	20	3	0·22	−0·58	27·5	+ 9·0	43	+14
	Southampton	50	30	46·1	34·8	40·5	− 5·2	11	28	1	0·02	−0·68	28·2	+11·9	44	+19
	Hurst Castle	50	32	46·7	37·1	41·9	− 4·6	13	20	2	0·05	−0·65	*	*	*	*
	Stowell Ⓜ	48	30	44·0	34·1	39·1	− 4·9	6	29	0	−	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	43	26	41·7	30·7	36·7	− 6·4	0	37	0	−	−2·05	*	*	*	*
	Glasgow	47	31	43·8	34·1	39·0	− 3·6	5	29	0	−	−0·90	16·7	+ 8·9	28	+15
	Ardrossan	48	32	45·0	34·6	39·8	− 4·8	8	28	1	0·01	−0·89	*	*	*	*
	Glenlee Ş	48	23	44·8	31·5	38·2	− 3·5	8	39	1	0·01	−1·39	*	*	*	*
	Douglas (Isle of Man)	50	27	46·5	36·9	41·7	− 3·3	13	21	2	0·06	−1·03	25·1	+ 9·1	41	+15
7. ENGLAND, N.W.	Stonyhurst	47	28	43·9	35·6	39·8	− 3·6	5	24	5	0·19	−0·89	20·3	+ 8·5	33	+13
	Blackpool Ⓜ	50	28	46·6	33·9	40·3	− 3·7	13	32	2	0·04	−0·79	21·2	+ 9·2	35	+15
	Manchester	51	26	45·6	34·4	40·0	− 3·3	10	29	2	0·09	−0·79	11·1	?	18	?
	Liverpool Obsy. (Bidston)	49	33	45·9	35·7	40·8	− 4·0	11	25	2	0·03	−0·69	*	*	*	*
	Llandudno Ⓜ	50	33	46·8	40·8	43·8	− 2·5	18	3	1	0·02	−0·78	14·8	+ 2·8	24	+ 5
	Holyhead	51	37	47·6	41·9	44·8	− 2·4	20	0	3	0·03	−0·93	*	*	*	*
8. ENGLAND, S.W.	Llandovery	49	22	46·1	29·1	37·6	− 6·8	11	48	1	0·03	−1·20	*	*	*	*
	Pembroke	49	36	46·4	38·1	42·3	− 5·5	18	11	0	−	−0·90	39·9	+24·3	63	+37
	Bristol (Montpelier)	50	30	46·2	34·8	40·5	− 4·2	12	28	0	−	?	*	*	*	*
	Arlington (N. Devon)	48	31	44·6	36·1	40·4	− 4·6	7	23	0	−	−1·48	*	*	*	*
	Cullompton Ⓜ	49	28	45·6	34·6	40·1	− 5·2	10	28	2	0·02	−0·75	35·0	+21·5	55	+34
	Falmouth	53	35	46·9	38·7	42·8	− 5·6	19	9	1	0·04	−1·24	35·0	+16·0	55	+26
	Plymouth	50	36	46·5	37·4	42·0	− 5·4	13	13	0	−	−0·90	35·6	+20·5	56	+31
	Prawle Point	49	33	46·0	36·7	41·4	− 5·7	11	22	1	0·01	−0·74	*	*	*	*
9. IRELAND, N.	Malin Head	49	39	46·0	41·6	43·8	− 0·1	14	1	1	0·02	?	*	*	*	*
	Londonderry	49	31	46·7	34·7	40·7	− 3·3	13	29	3	0·08	−0·90	*	*	*	*
	Edenfel (Omagh)	48	28	44·4	32·7	38·6	− 4·0	7	35	1	0·02	−0·80	*	*	*	*
	Belmullet	52	32	47·0	35·4	41·2	− 6·2	14	27	3	0·07	?	*	*	*	*
	Markree Castle	48	20	46·2	27·5	36·9	− 6·8	12	54	0	−	−0·87	22·7	+ 8·2	37	+14
	Brookeborough	49	24	46·2	31·9	39·1	− 3·4	12	39	0	−	−0·97	*	*	*	*
	Armagh	48	24	45·4	32·2	38·8	− 4·2	10	37	0	−	−0·65	24·6	+10·7	40	+17
	Donaghadee	50	33	47·7	39·7	43·7	− 1·0	22	6	1	0·02	−0·74	*	*	*	*
	Edgeworthstown												*	*	*	*
10. IRELAND, S.	Dublin	51	31	47·4	38·1	42·8	− 3·0	22	11	5	0·16	−0·42	14·4	− 3·4	23	− 6
	Parsonstown	47	22	45·6	28·3	37·0	− 7·0	10	51	1	0·02	−0·63	20·4	+ 4·4	33	+ 7
	Kilkenny	50	26	45·7	33·7	39·7	− 5·7	10	32	3	0·06	−0·58	*	*	*	*
	Waterford	50	28	46·9	35·5	41·2	− 5·9	14	26	4	0·18	−0·67	*	*	*	*
	Roche's Point	52	34	48·6	37·3	43·0	− 4·7	27	13	0	−	−1·00	*	*	*	*
	Valencia	50	33	47·4	36·4	41·9	− 6·6	15	23	0	−	−1·33	36·7	+19·5	58	+33
	Killarney	51	23	46·0	27·8	36·9	− 9·6	11	53	1	0·02	?	*	*	*	*
	Foynes	48	31	45·5	35·4	40·5	− 4·4	10	26	0	−	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	55	39	49·0	42·0	45·5	− 4·7	25	0	0	−	−0·85	*	*	*	*
	Jersey	59	39	49·4	42·0	45·7	− 3·2	26	0	3	0·33	−0·69	33·0	+14·9	51	+14

Stations marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ş with the Scottish Meteorological Society.

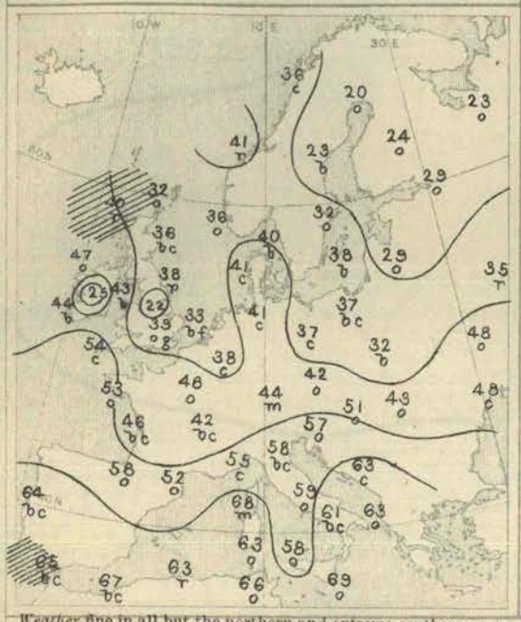
* An asterisk is inserted in all places for which the information is not usually received.

† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row) at the Kew Observatory, and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

Sunday, 5th November.

Temperature and Weather.

8 a.m.

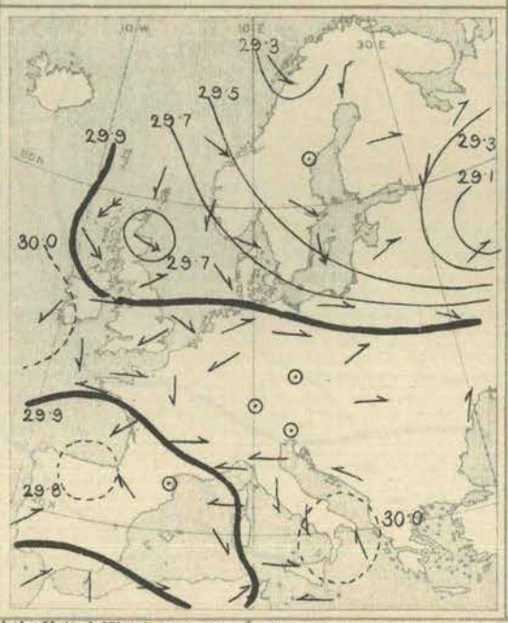


Weather fine in all but the northern and extreme southern parts of the United Kingdom; rain and sleet falling in the north of Scotland, and misty drizzle reported at some of the Channel stations. Cloudy or overcast in most of the Continental countries, but fine in north Germany, and also over northern Italy and the south of Spain. Showers of cold rain, sleet, or snow falling later in all the more northern parts of our Islands; heavy rain reported at Belfort and Lisbon, as well as at some of the Italian stations.

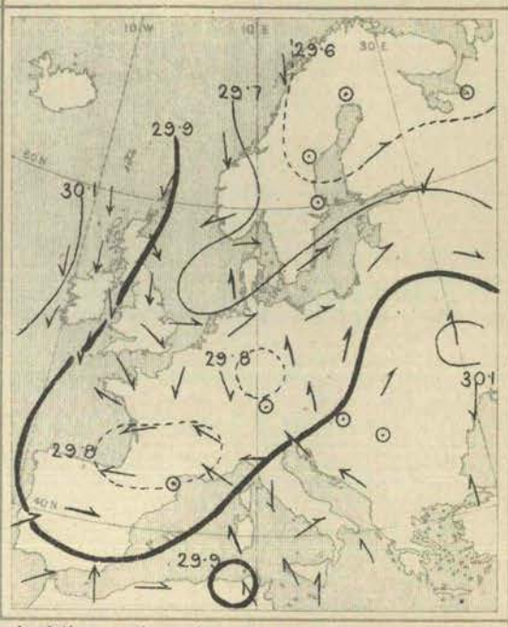
Temperature fallen rapidly over the central parts of England and Ireland, and also over Germany and the Netherlands, risen in the south of Russia, changed irregularly elsewhere. Morning readings highest, 69° at Malta, 67° at Oran, and 66° at La Calle and Sfax; above 60° at several of the Mediterranean and Adriatic stations. Lowest, (1) 20° at Haparanda, 23° at Archangel, and 24° at Kuopio; (2) 22° at Loughborough, and 25° at Cambridge and Parsonstown; below the freezing point over the central parts of England and Ireland generally. Daily maxima below 50° on all but our extreme south and south-west coasts, and very little above 40° in the north of Scotland.

Barometer and Wind.

8 a.m.



6 p.m.



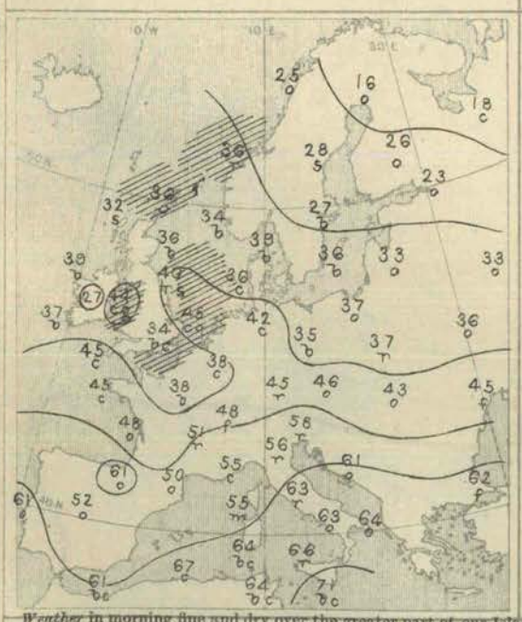
Wind showing a distinct cyclonic circulation over the northern parts of our Islands, with a gale from the North-Eastward in the Hebrides. Light from the North-Eastward on our south and south-west coasts, and from the Eastward in the west and south of France. Westerly or North-Westerly over Scandinavia, Denmark, north Germany, and the Baltic, with a gale at Memel; light from the South-Westward over the central and southern parts of Russia. Variable over Italy, Spain, and Algeria. Strong Northerly winds setting in later over all the more northern parts of our Islands, with a gale in the east of Scotland.

Barometer highest, 30·0 ins. and upwards over the west and south of Ireland, and also over the south of Italy. Lowest, 29·1 ins. and less in a well-marked depression over central Russia; 29·7 ins. and less in another disturbance over Scotland, with its centre near the Moray Firth; 29·8 ins. and less in a shallow system over the north of Spain. Scotch depression subsequently moving south-eastwards across the North Sea, and barometer rising briskly on our northern coasts. Russian depression travelling away to the north-eastward.

Monday, 6th November.

Temperature and Weather.

8 a.m.

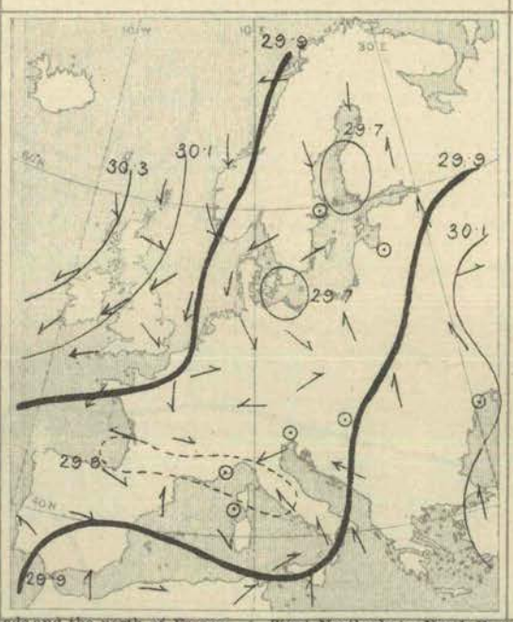


Weather in morning fine and dry over the greater part of our Islands and the north of France, as well as on the Spanish and Portuguese coasts, and at many of the Danish and north German stations; cloudy or overcast elsewhere, with snow showers at several of our northern stations, rain at Christiansund, as well as over the southern parts of France and Germany, and many parts of Italy and Sicily. Cold showers in the north and east of our Islands later, as well as at many of the Continental stations—amounts considerable at Cape Gris Nez, Munich, Jersey, and Shields, and also over northern Italy. Thunder and lightning reported at Jersey and the North Foreland.

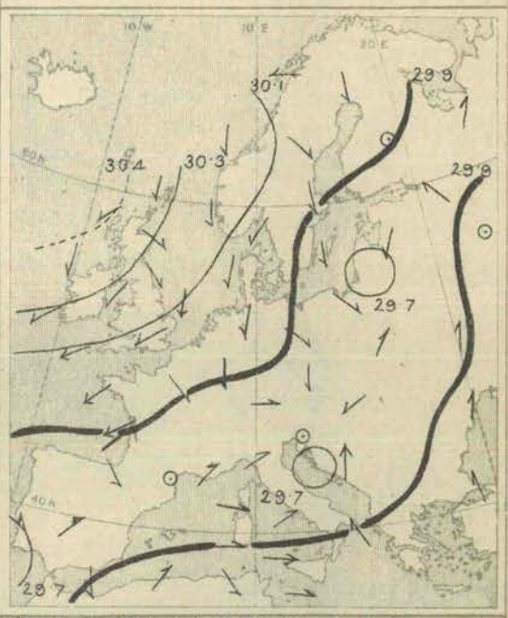
Temperature fallen decidedly over western Europe, risen at some eastern stations. Morning readings highest, 71° at Malta, and above 60° at most of the extreme southern stations, much lower elsewhere. Lowest, 16° at Haparanda, 18° at Archangel, and below 30° over northern Europe generally; 27° at Parsonstown, 31° at Loughborough, 32° at Oxford, 34° in London, 35° in Berlin, 38° at Paris. Failing to reach 50° over Great Britain or Ireland during the day, but touching 63° to 68° in the south of France, and exceeding 70° in the south of Italy.

Barometer and Wind.

8 a.m.



6 p.m.



Wind Northerly to North-Easterly over the whole of the British Isles, the North Sea, and English Channel, and blowing strongly at many of the coast stations. Light from the South-Westward at most of the German stations, and from the Southward or South-Eastward over the western parts of Russia. Variable in Spain and the south of France; South-Easterly or Southerly over Italy and Algeria. Subsequently increasing to a moderate or fresh gale from the Northward on some parts of our east and south-east coasts, but falling moderate in the west and north of our Islands.

Barometer highest, 30·3 ins. and upwards in an anticyclone lying off our extreme north-west coasts; 30·1 ins. and upwards in another system over the Black Sea and south of Russia. Lowest, 29·7 ins. and less in two depressions lying respectively over the Baltic and Gulf of Bothnia; 29·8 ins. and less in an elongated area stretching across the south of France and northern Italy. Anticyclone in north-west subsequently spreading eastwards, and barometer rising in all parts of western Europe.

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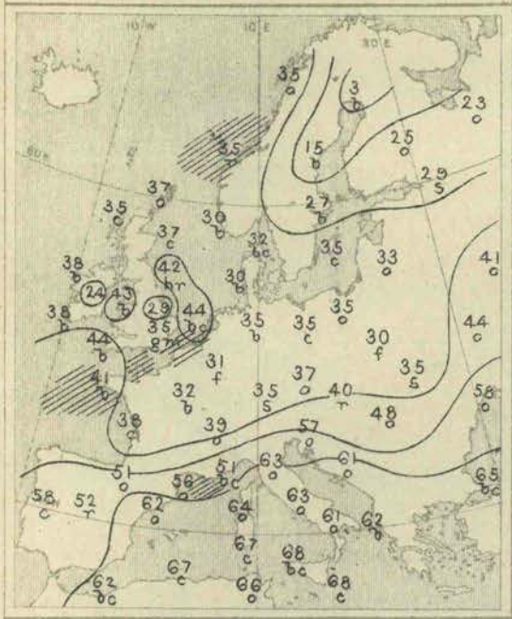
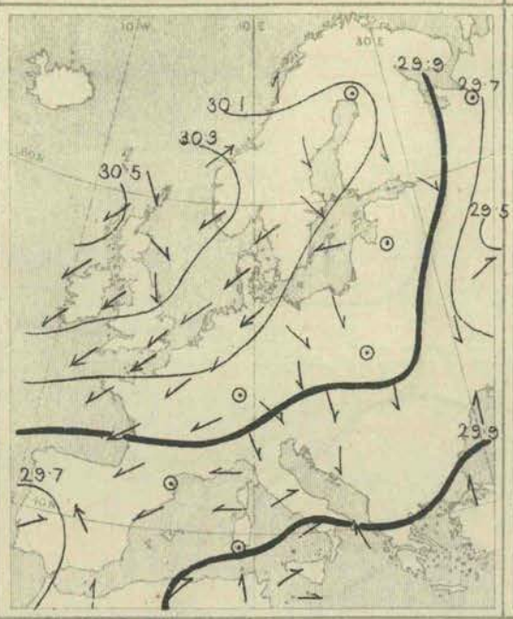
Tuesday, 7th November.

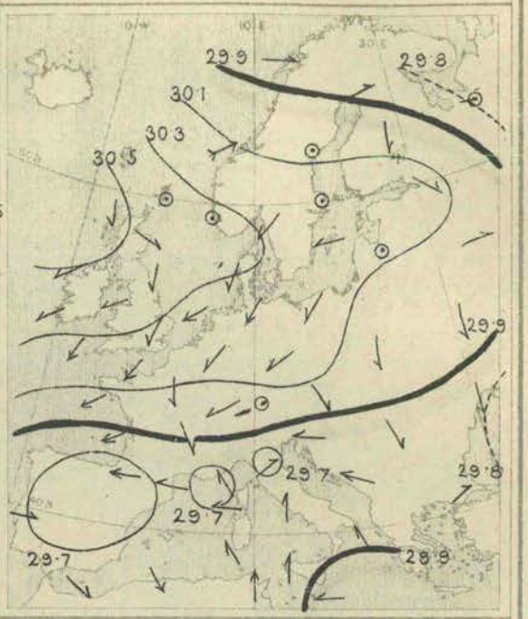
Temperature and Weather. — 8 a.m.



Barometer and Wind. — 8 a.m.



Barometer and Wind. — 6 p.m.



Weather fine and bright over the greater part of north-western Europe, but dull in the extreme north of Scotland and the west of Norway, with rain at Christiansund. Dull in most of the eastern, central, and southern countries; with snow at St. Petersburg, Swinemunde, and Munich, and with rain at Madrid. Fine in Algeria and southern Italy. Smart showers of rain or hail occurring during day on our east and south-east coasts, with thunder at the North Foreland. Considerable quantities of rain falling in Norway, and also in Spain, the south of France, and northern Italy.

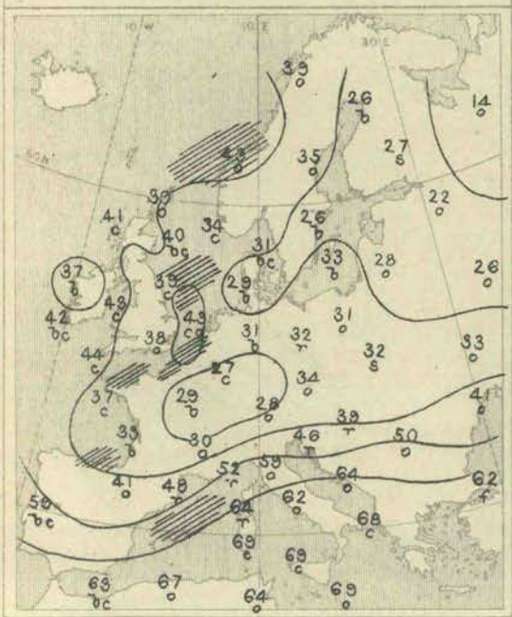
Temperature risen decidedly in Russia and slightly in the north of our Islands, but fallen elsewhere. Morning readings highest, 68° at Palermo and Malta, 67° at Cagliari and Algiers, and 66° at La Calle, above 60° at most of the Mediterranean stations. Lowest, 3° at Haparanda, 5° at Uleaborg, and 15° at Hernösand; below the freezing point over the central parts of England, Ireland, and France. Daily maxima below 45° in many parts of the United Kingdom, but exceeding 60° in the south of France, and exceeding 70° in the south of Italy. Frost occurring over the inland parts of England and Ireland at night.

Wind light from the Northward in the north and north-east of our Islands, as well as over Denmark, Germany, and Austria. Moderate to fresh from the North-Eastward on our western and southern coasts, and from the Eastward in the west of France. Moderate to strong from the South-Westward or Southward in the west of Norway, light from the Northward over Sweden and the west of Russia. South-Westerly over Italy. Variable in Spain, Southerly in Algeria. No important change occurring during day, but gale setting in at Christiansund in evening.

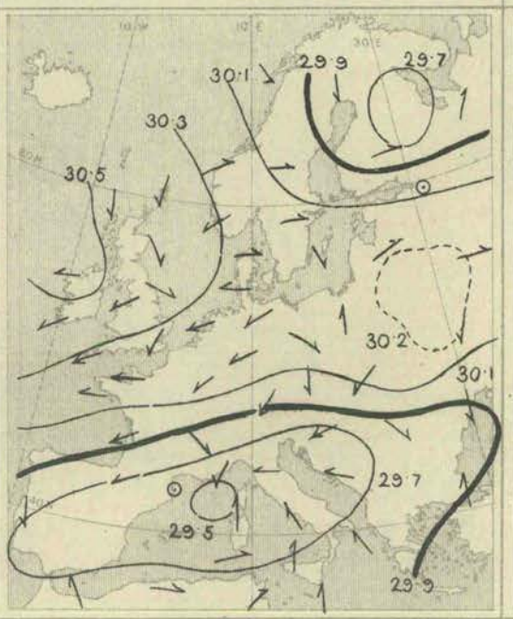
Barometer highest, 30·5 ins. and upwards in the north-west of Scotland, 30·3 ins. and upwards in an anticyclone covering all the more northern parts of our Islands and the North Sea. Lowest, 29·5 ins. and less in a depression over central Russia, 29·7 ins. and less in another disturbance over Portugal, 30·0 ins. and less in a third system off the north-west of Norway. Portuguese depression subsequently moving eastwards across Spain; Russian disturbance travelling away to the south-eastward.

Wednesday, 8th November.

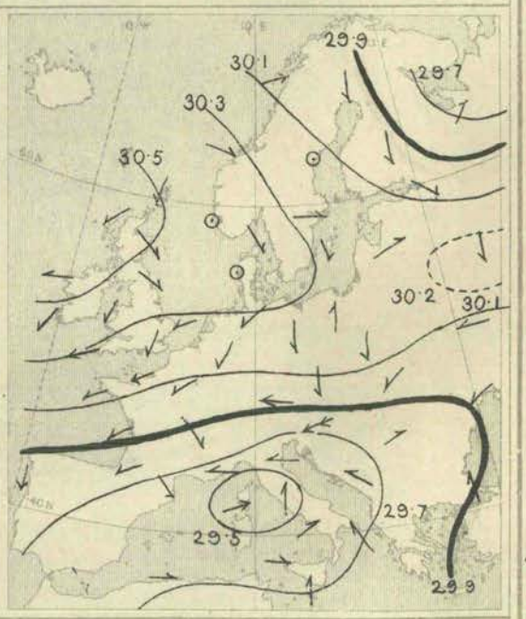
Temperature and Weather. — 8 a.m.



Barometer and Wind. — 8 a.m.



Barometer and Wind. — 6 p.m.



Weather fine over the greater part of the United Kingdom, but showery with hail on our extreme south-east coasts. Fine also over Denmark, the Netherlands, the south of Scandinavia, and the north of France, but dull in most other parts of the Continent, with rain in Austria, the south of France, and the north-east of Spain, and with snow at Warsaw, Lemberg, and Nicolaieff. Showers falling during day in several parts of Great Britain, and heavy rain over Italy and the south of France, the largest amounts measured next morning being 2·9 ins. at Leghorn (where a thunderstorm occurred) and 2·1 ins. at Naples.

Temperature risen slightly over north-western Europe, but fallen elsewhere. Morning readings highest, 69° at Cagliari, Palermo, and Malta, 68° at Brindisi, and 67° at Algiers; above 60° at several of the Mediterranean and Adriatic stations. Lowest, 14° at Archangel, 22° at Helsingfors and St. Petersburg, and 26° at Haparanda and Moscow; below the freezing point in many parts of northern and central Europe and also over central Ireland. Daily maxima over our Islands ranging in most places between 45° and 47°. Thermometer exceeding 55° in the south of France, and exceeding 70° at most of the Italian stations.

Wind Northerly in Scotland, but North-Easterly or Easterly over Ireland, England, France, and western Germany; fresh or strong in force over the Channel and Bay of Biscay. Light from the Westward over the northern parts of Scandinavia and Russia, but North-Easterly in the south of Russia, and North-Westerly in Austria. South-Easterly or Easterly in Italy, variable in Algeria. No important change occurring over western Europe during day, but Easterly gale (the Bora) setting in at Trieste.

Barometer highest, 30·5 ins. and upwards over the north-west of Ireland; 30·3 ins. and upwards over the greater part of our Islands and the North Sea. Lowest, 29·5 ins. and less in a depression lying off the south of France, 29·7 ins. and less in another disturbance over Finland. Barometer rising during day at most of the northern stations, but falling slightly in the south depressions over northern and southern Europe both moving eastwards.

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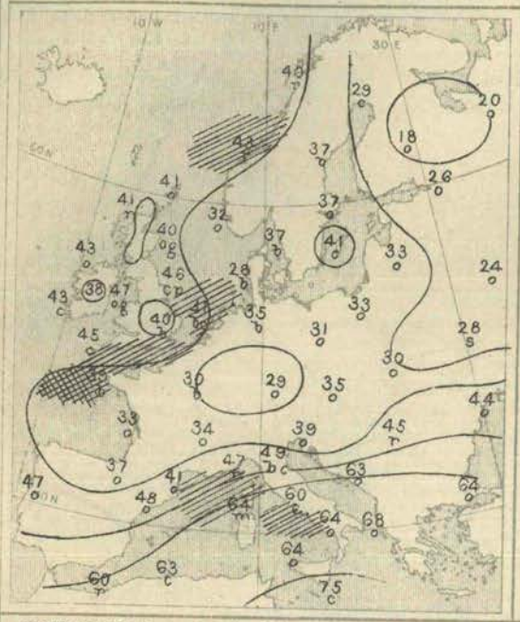
Thursday, 9th November.

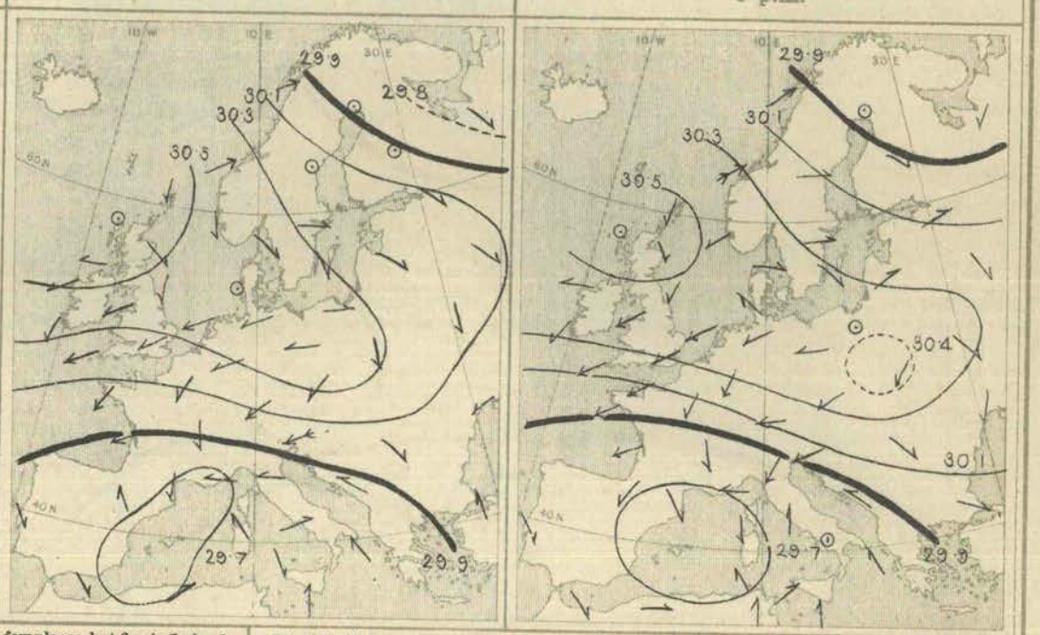
Temperature and Weather. 8 a.m.



Weather cloudy in most parts of Great Britain, with showers in a few places, but fine in Ireland. Fine and bright over Denmark, the Netherlands, and the north of France, dull in most other parts of the Continent, with rain in the west of Norway and the extreme south of France, and snow at Kieff. Slight showers falling later at several of our northern stations, and heavy rain in Italy and the south of France, the largest amounts being 2·6 ins. at Toulon and 2·4 ins. at Brindisi.

Temperature risen slightly in most of the north-western countries, but fallen elsewhere. Morning readings highest, 75° at Malta, 68° at Brindisi, and 64° at Sanguinaire, Naples, and Constantinople. Lowest, 18° at Kuopio, 20° at Archangel, 24° at Moscow, and 25° at Uleaborg, below the freezing point in many parts of Russia, Germany, and Denmark, and below 40° in several parts of the United Kingdom. Rising during day to between 44° and 48° in most parts of our Islands, but remaining below 40° over Germany, the Netherlands, and central France, exceeding 55° in the Riviera, and exceeding 70° in the southern parts of Italy.

Barometer and Wind. 8 a.m. and 6 p.m.

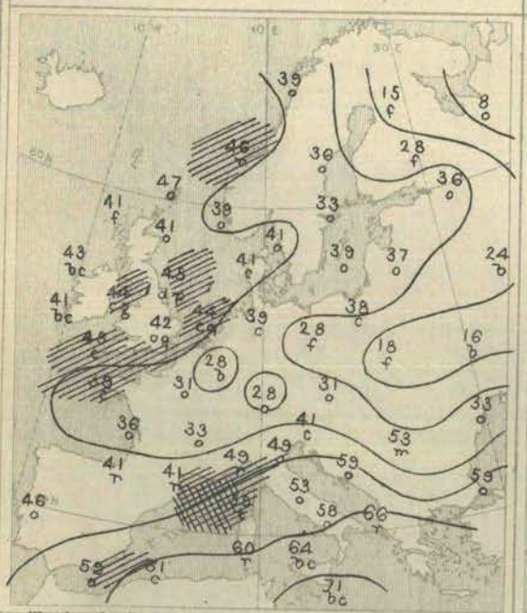


Wind North-Easterly or Easterly over Ireland, England, France, Germany, and northern Italy. Strong in force over the Channel and Bay of Biscay, and blowing a gale from the North-Eastward at Munich and Trieste. Strong from the Westward in the west of Norway, light from the North-Westward over Sweden, Denmark, and Russia. Variable over Spain, Algeria, and the south of Italy. Subsequently increasing to a gale from the Eastward over the Channel and south-east of England, and from the South-Westward in the west of Norway.

Barometer highest, 30·5 ins. and upwards over Scotland and the adjacent parts of the North Sea. Lowest, 29·7 ins. and less in a large depression over the western parts of the Mediterranean, and also in a smaller system over central Italy; 29·8 ins. and less in the extreme north of Russia. Mediterranean depression subsequently spreading northwards, new disturbance beginning to approach the north-west of Norway.

Friday, 10th November.

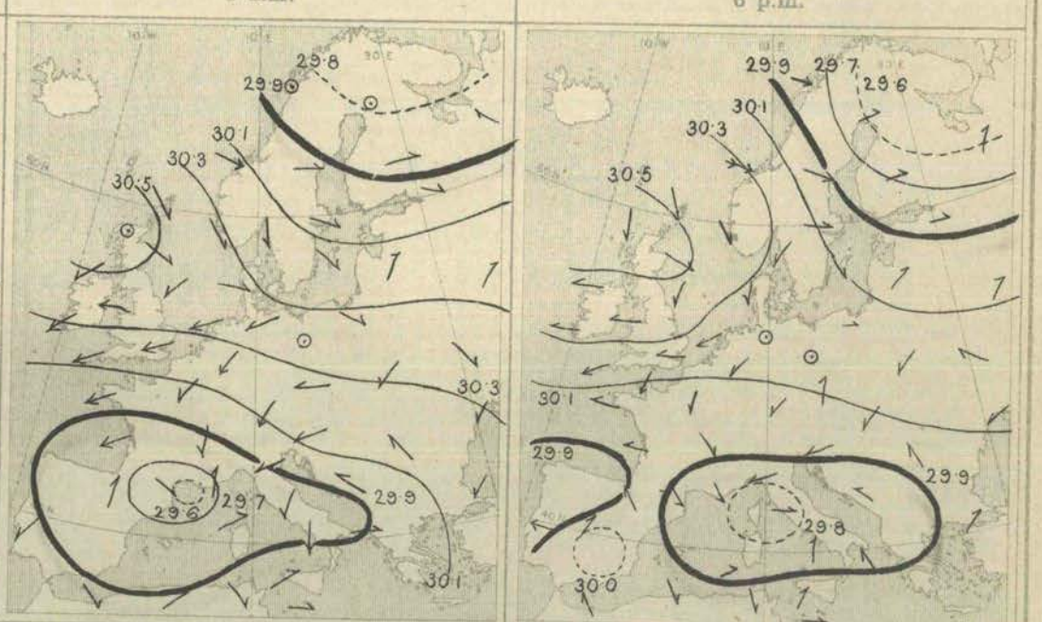
Temperature and Weather. 8 a.m.



Weather cloudy or dull in most parts of our Islands and the Continent, with fog in Finland and central Germany, and with rain in the south of France, as well as at Christiansund and Brindisi. Fine and bright on some parts of our own south and south-west coasts, and also over the Netherlands and central Russia. Showers falling during day in the eastern and south-eastern parts of Great Britain, and further large amounts of rain in Italy and the south of France, the largest of all being 1·6 ins. at Leghorn.

Temperature fallen considerably in the south of Russia, and slightly over Germany, Austria, and Italy, but risen in most other countries. Morning readings highest, 71° at Malta, 68° at Sfax, 66° at Brindisi, and 64° at Palermo and La Calle; above 55° at most of the Mediterranean and Adriatic stations. Lowest, 8° at Archangel, 14° at Kharkov, 15° at Uleaborg, and 16° at Kiev; below the freezing point over Germany, Austria, and central France. Daily maxima over our Islands ranging in most places between 45° and 49°; thermometer remaining below 40° over central France, but exceeding 50° in the south of that country, and exceeding 65° over the southern parts of Italy, the highest reading of all being 81° at Palermo.

Barometer and Wind. 8 a.m. and 6 p.m.



Wind Easterly or North-Easterly over England, Ireland, France, Germany, the Netherlands, and northern Italy; strong in force over the Bay of Biscay and the west and south of our Islands, with a gale on the Kentish coasts. Light from the North-Westward in the north-east of Scotland, and also over Scandinavia and the greater part of Russia. South-Westerly or Westerly in the south of Italy; variable in Algeria. Wind moderating somewhat later on our western and southern coasts, but Westerly gale setting in over the west of Norway.

Barometer highest, 30·5 ins. and upwards over Scotland; 30·3 ins. and upwards in an anticyclone covering the North Sea and all the more northern parts of our Islands, and extending eastwards in the form of a long band across north Germany and Poland to the southern parts of Russia. Lowest, 29·3 ins. and less over Lapland; 29·6 ins. and less in a small depression over the Gulf of Lyons. Rise taking place over western Europe during day, and gradients decreasing over our southern coasts. Depression over Gulf of Lyons partially filling up.

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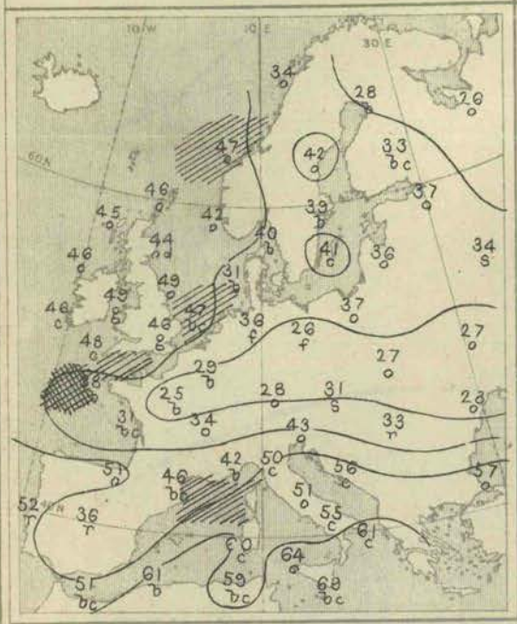
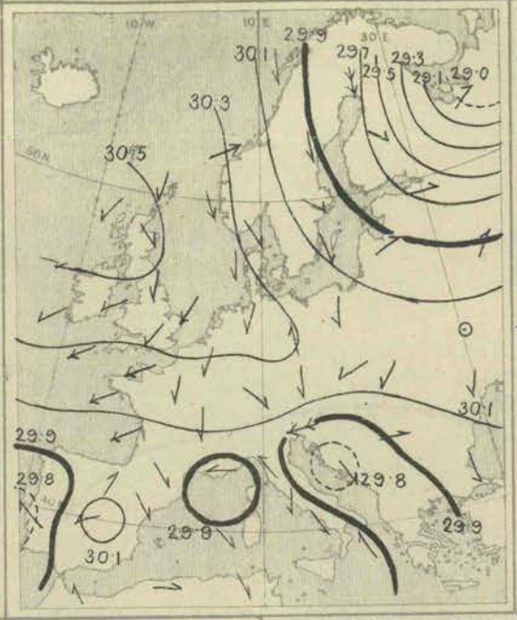
Saturday, 11th November.

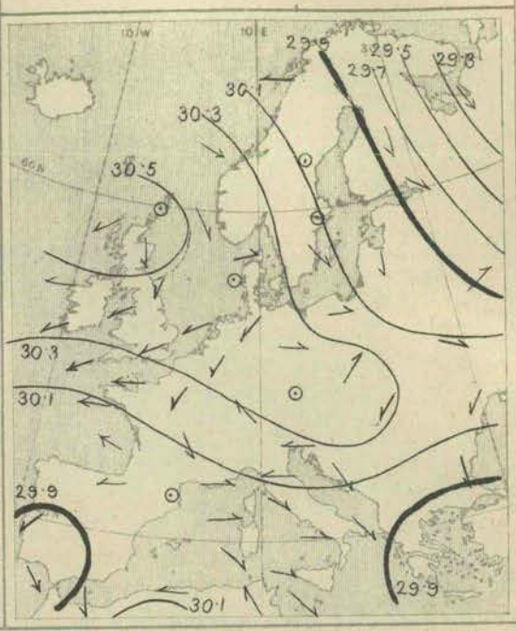
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather cloudy or overcast in most parts of our Islands and the Continent, with rain at Aberdeen and Liverpool, as well as at Madrid and Lisbon, and with snow at Moscow and Vienna. Foggy over north Germany, fine and bright over Denmark, the Netherlands, and the greater part of France. A little rain falling later over Scandinavia and the north-eastern parts of Great Britain, as well as at some of the Italian stations; sky clearing over northern Russia.

Temperature risen in all but the central and southern countries. Morning readings highest, 69° at Malta, 64° at Palermo, and 61° at Brindisi and Algiers; above 50° at most of the Mediterranean and Adriatic stations, and above 45° in many parts of the United Kingdom. Lowest, (1) 14° at Kharkov, 23° at Warsaw, 25° at Wiesbaden and Paris, and 26° at Berlin; (2) 26° at Archangel and 28° at Uleaborg. Daily maxima below 40° over the central parts of France and Germany, but thermometer exceeding 50° at several of the English and Irish stations, and exceeding 60° over Spain and the south of Italy, the highest reading of all being 70° at Palermo and Malta.

Wind Easterly or North-Easterly over England, Ireland, the Netherlands, and the greater part of France and Spain; strong in force over the western parts of the Channel. Northerly or North-Westerly over Scandinavia, Denmark, and the Baltic; Westerly or South-Westerly at most of the Russian stations. Light from the North-Eastward in Austria and the extreme south of Russia; variable in Italy and Algeria. North-Westerly winds setting in later over Italy; no important change occurring elsewhere.

Barometer highest, 30·5 ins. and upwards over Scotland. Lowest, 29·0 ins. and less in a deep depression over the extreme north of Russia; 29·8 ins. and less in a shallow disturbance over the northern parts of the Adriatic, and also in another shallow system over the Gulf of Genoa. Russian depression subsequently moving eastwards; disturbances over southern Europe partially filling up.

GENERAL NOTES.

At the commencement of the week the distribution of pressure over the greater part of Europe was cyclonic, the main depressions being found over Scandinavia and Russia, with secondary systems in many other localities. On the 6th, however, a large anticyclone spread over our Islands from the Atlantic, and in the course of the ensuing 24 hours, the system extended over a considerable portion of north-western, northern, and central Europe. Depressions now advanced over Spain, Italy, and the western parts of the Mediterranean from the Atlantic, and a decided current of wind from the North-Eastward or Eastward set in over our Islands, France, and Germany, with a gale in the English Channel on the 9th and 10th. At the close of the week the southern depressions were filling up, and the North-Easterly wind was, therefore, decreasing in force. On the 10th and 11th, a large depression moved eastwards across the northern parts of Scandinavia and Russia, and occasioned Westerly gales in many parts of northern Europe.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 266.

Stations.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	Stations.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	7·5	?	13	?	EASTBOURNE	26·3	?	41	?
OSWALDKIRK (Yorkshire)	13·6	?	22	?	TENBY	33·4*	?	53*	?
WORKSOP	15·6	+ 2·1	25	+ 3	NEWQUAY				
THURCASTON (Leicestershire)	22·6	+ 8·7	36	+14	TORQUAY	24·1*	?	38*	?
MARGATE	19·2	?	30	?	ARLEY COTTAGE (County Cavan)	30·3	?	50	?
WESTBOURNE (Sussex)	22·0*	?	34*	?	GUERNSEY	19·3*	?	30*	?
BRIGHTON	32·5	?	51	?					

* The values at Westbourne, Tenby, Torquay and Guernsey are obtained by Jordan's Photographic Recorder.

REPORTS received too late for insertion in their proper places.

Date of Report.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-Degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°	°	°		Inches.	Inches.				
June 10th, 1893.	Edenfel	76	44	68·3	48·6	57·8	+4·1	111	0	5	0·48	−0·10	—	—	—	—
,, ,, ,,	Edgeworthstown	75	44	69·6	48·3	57·8	+4·1	111	0	4	1·06	+0·36	—	—	—	—
,, 24th, ,,	Lairg	80	45	60·6	48·6	54·2	+0·7	85	0	5	0·44	−0·14	—	—	—	—
July 1st, ,,	Jersey	—	—	—	—	—	—	—	—	—	—	—	64·7	+11·9	58	+10
,, 22nd, ,,	York	—	—	—	—	—	—	—	—	—	—	—	43·6	+ 7·4	39	+ 7
,, 29th, ,,	Scarborough	70	47	64·5	52·5	58·1	−1·4	113	0	2	0·16	−0·54	—	—	—	—
,, ,, ,,	Edgeworthstown	71	47	67·1	51·4	58·7	+1·2	117	0	6	0·24	−0·62	—	—	—	—
Aug. 5th, ,,	Churchstoke	70	48	65·0	51·2	57·7	−0·4	110	0	5	0·63	−0·02	39·1	0·0	37	0
,, ,, ,,	Blackpool	67	49	64·3	55·2	59·5	−0·3	123	0	6	1·40	+0·62	48·0	+ 9·8	44	+ 8
,, 12th, ,,	Jersey	—	—	—	—	—	—	—	—	—	—	—	80·2	+25·0	79	+25
Sept. 2nd, ,,	Llandudno	—	—	—	—	—	—	—	—	—	—	—	32·0	0·0	34	0
,, ,, ,,	Killarney	72	41	65·0	45·0	54·4	−2·1	87	0	1	0·03	*	—	—	—	—
,, 9th, ,,	Lairg	73	36	62·1	44·3	52·8	+9·5	76	0	4	0·67	−0·01	—	—	—	—

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WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; R. H. SCOTT, F.R.S., SECRETARY.

By whom Subscriptions, payable in advance, can be received.

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VOL. X. No. 46.] *Third Series.* WEEK ENDING SATURDAY, 18TH NOVEMBER, 1893. [*Price 6d.* *Annual Subscription, post paid*, £1 10s. 0d.

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871-90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the twenty-five years 1866-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the ten years 1881-90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

	DISTRICTS. (See p. 272.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 1st, 1893. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	49	22	41·8	32·1	37·0	4 below.	0	−18	35	+20	2328	+496	588	− 20
	1. SCOTLAND, EAST	54	23	43·3	34·2	38·8	2 below.	4	−16	29	+ 9	2616	+302	663	+ 14
	2. ENGLAND, N.E.	55	29	48·1	38·9	43·5	2 above.	24	+ 1	9	− 4	2908	+431	498	− 47
	3. ENGLAND, EAST	59	26	47·7	36·0	41·9	1 below.	16	−10	25	+11	3386	+520	602	− 23
	4. MIDLAND COUNTIES	57	21	46·4	33·6	40·1	2 below.	12	−13	33	+17	3460	+657	598	− 31
	5. ENGLAND, SOUTH	58	24	47·9	37·8	42·9	1 below.	24	−10	12	+ 3	3702	+581	416	− 41
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	53	26	45·8	36·5	41·2	1 below.	11	−13	22	+11	2858	+466	442	− 22
	7. ENGLAND, N.W.	56	30	47·1	37·7	42·4	1 below.	21	− 5	12	+ 3	3339	+739	365	− 56
	8. ENGLAND, S.W.	56	23	48·4	39·5	44·0	1 below.	25	−14	7	+ 3	3609	+686	280	− 57
	9. IRELAND, NORTH	53	21	45·8	35·8	40·9	2 below.	11	−16	25	+14	3091†	+538	337	− 64
	10. IRELAND, SOUTH	57	26	47·9	37·9	42·9	3 below.	24	−13	11	+ 3	3481	+582	231	− 76
	—CHANNEL ISLANDS	57	34	52·3	42·5	47·4	1 below.	38	−17	0	0	4177	+839	70	− 53

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 272.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the mean for the Week.	From Jan. 1st, 1893. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 1st, 1893. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of ins.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	4	19	6 more.	215	+ 2	45·7	+ 3·2	4	− 2	8	− 4	982	−137	24	− 3
	1. SCOTLAND, EAST	4	12	4 more.	176	− 5	24·0	− 4·1	5	− 8	8	− 18	1331	+ 39	32	+ 1
	2. ENGLAND, N.E.	5	8	2 more.	148	−14	18·3	− 5·1	11	− 1	18	− 2	1507	+320	37	+ 8
	3. ENGLAND, EAST	5	11	4 more.	146	−14	17·6	− 5·5	17	+ 4	29	+ 7	1763	+311	43	+ 7
	4. MIDLAND COUNTIES	4	7	1 more.	139	−18	17·4	− 8·1	9	− 3	15	− 6	1657	+362	41	+ 9
	5. ENGLAND, SOUTH	5	11	4 more.	139	−14	20·3	− 4·1	15	0	24	0	1805	+399	44	+ 9
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	2	8	5 less.	171	−13	34·5	− 9·2	8	− 2	14	− 4	1491	+215	36	+ 5
	7. ENGLAND, N.W.	3	5	4 less.	160	−10	26·2	− 4·8	9	0	15	0	1459	+196	36	+ 5
	8. ENGLAND, S.W.	4	14	4 more.	147	−30	28·3	− 7·2	7	− 7	11	− 12	1877†	+359	46	+ 9
	9. IRELAND, NORTH	3	9	1 more	184	−15	29·3	− 2·5	15	+ 1	26	+ 1	1308	+131	32	+ 3
	10. IRELAND, SOUTH	4	9	0 (average)	162	−20	26·7	− 7·5	16	+ 1	26	+ 1	1457	+ 88	36	+ 2
	—CHANNEL ISLANDS	5	12	2 more.	157	−31	24·2	− 4·9	16	+ 1	26	+ 2	2202	+418	54	+ 10

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather was fair at the commencement of the week, but soon became very unsettled, with heavy rain in the south of England on the 14th. The latter half of the period was exceedingly rough, severe gales being experienced in all districts, with heavy falls of rain in the west and north, and with snow in most parts of Great Britain, as well as at some of the Irish stations.

Temperature was below the mean in all districts excepting England N.E., the deficit being slight in most places, but amounting to as much as 4° in Scotland N. The highest readings were observed, as a rule, either on the 16th or 17th, when the thermometer exceeded 55° in most of the English districts, as well as in Ireland S., in England E. (at Cambridge) the maximum on the 17th was as high as 59°. The lowest readings occurred on the 14th or 15th, when sharp frost was reported in all districts excepting the Channel Islands. In the Midland Counties and Ireland N. the thermometer fell as low as 21°.

Rainfall was in excess of the mean in all the "Wheat producing" districts, as well as in England S.W. and Ireland N. In Ireland S. and the Channel Islands, however, the amount was about equal to the normal, while in Scotland W. and England N.W. there was a rather large deficiency.

Bright Sunshine was slightly in excess of the mean in the central and eastern parts of England and also in Ireland and the Channel Islands. Elsewhere the amount was less than the normal, the deficiency being large in Scotland E. and England S.W. The percentage of possible duration ranged from 29 in England E. and 26 in Ireland and the Channel Islands, to only 8 in Scotland N. and E.

Barometer and Wind.—At the beginning of the period an anticyclone lay over the greater part of our Islands, the wind being light from the Northward in the northern districts, but strong from the Eastward or North-Eastward in the south. The high-pressure system soon gave way, however, and, on the 14th, a shallow depression advanced east-north-eastwards along the English Channel, the wind being at first very variable and afterwards Northerly. The latter part of the week was influenced by a very deep disturbance, the centre of which travelled at first in a north-north-easterly direction across Ireland and Scotland, and afterwards in a south-south-easterly direction along our east coasts. The earlier movement of the depression was attended by strong Southerly or South-Easterly gales on nearly all coasts, while, on the 18th, when a rapid rise of the barometer took place in the west and north, severe gales from the Northward spread gradually over the entire Kingdom.

† This value has been altered slightly owing to the receipt of further information for a preceding week.

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II.—DATA from which the SUMMARY on page 271 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°				Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head Ⓢ	48	25	44·0	34·3	39·2	- 2·3	6	29	4	2·39	+1·42	*	*	*	*
	Stornoway Ⓢ	47	30	43·6	36·0	39·8	- 1·7	4	22	4	2·25	+1·20	7·3	-2·0	14	- 4
	Wick Ⓢ	49	26	43·6	34·0	38·3	- 2·2	4	29	4	2·76	+2·08	*	*	*	*
	Lairg Ⓢ	43	22	37·8	28·6	33·2	- 6·5	0	62	4	1·74	+0·87	*	*	*	*
	Glencarron Ⓢ	47	23	41·2	28·9	35·1	- 4·8	0	48	4	1·73	-0·54	*	*	*	*
	Fort Augustus Ⓢ	47	23	40·8	31·2	36·0	- 5·8	0	42	4	1·29	+0·29	2·6	?	5	?
	Fort William Ⓢ	48	27	41·7	32·0	36·9	- 4·8	0	36	2	0·89	-0·93	3·3	?	6	?
1. SCOTLAND, E.	Nairn	46	27	40·4	32·3	36·4	- 4·1	0	39	4	1·35	+0·82	*	*	*	*
	Aberdeen	51	32	45·0	38·4	41·7	+ 0·4	8	15	5	2·30	+1·57	3·3	- 9·5	6	-18
	Braemar Ⓢ	46	23	40·2	30·3	35·3	- 2·4	0	47	5	1·08	+0·18	5·0†	?†	9†	?†
	Ochtertyre Ⓢ	49	27	43·9	33·6	38·8	- 1·3	5	31	3	1·87	+0·85	*	*	*	*
	Leith	54	31	46·4	35·6	41·0	- 1·5	12	25	3	0·10	-0·41	*	*	*	*
	Marchmont Ⓢ	50	30	43·7	35·1	39·4	- 0·9	5	25	5	0·29	-0·53	7·3	?	13	?
2. ENGLAND, N.E.	Alnwick Castle	52	35	46·7	40·3	43·5	+ 1·7	18	5	6	0·91	+0·12	*	*	*	*
	Durham	52	29	46·6	36·4	41·5	+ 0·6	13	23	5	0·60	-0·09	10·8	- 2·1	19	- 4
	Shields	55	38	49·7	40·1	44·9	+ 2·5	28	5	4	0·65	+0·03	*	*	*	*
	Scarborough Ⓜ												*	*	*	*
	York	55	32	49·4	37·3	43·4	+ 1·5	30	13	4	0·83	+0·31	9·2	- 0·6	16	- 1
	Spurn Head	53	36	48·1	40·6	44·4	+ 1·0	23	4	4	0·95	+0·38	*	*	*	*
3. ENGLAND, E.	Hillington Ⓜ	57	31	48·8	37·3	43·1	+ 1·3	27	13	4	1·14	+0·52	17·1	+ 4·9	29	+ 8
	Yarmouth	54	35	47·6	39·4	43·5	+ 0·2	21	7	5	0·86	+0·16	*	*	*	*
	Geldeston	56	34	47·5	36·6	42·1	- 0·9	23	15	5	1·06	+0·42	20·3	+ 5·3	34	+ 9
	Cambridge	59	27	48·4	33·0	40·7	- 1·3	18	36	4	1·17	+0·69	18·3	+ 3·4	31	+ 6
	Rothamsted	56	26	46·2	33·9	40·1	- 1·7	12	32	7	1·01	+0·38	14·0	?	23	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	55	27	49·0	33·4	41·2	- 0·6	20	35	4	0·66	+0·16	*	*	*	*
	Loughborough	56	21	48·0	32·7	40·4	- 1·7	17	37	4	0·86	+0·34	*	*	*	*
	Stamford (Ketton Hall)	56	25	47·7	34·1	40·9	- 1·1	16	32	6	0·81	+0·20	*	*	*	*
	Cheadle Ⓜ	53	25	44·5	33·3	38·9	- 2·1	7	32	3	2·42	-0·31	*	*	*	*
	Churchstoke Ⓜ	54	27	44·8	32·9	38·9	- 2·7	8	34	4	0·73	-0·09	6·8	- 5·0	11	- 9
	Hereford Ⓜ	55	24	45·7	35·1	40·4	- 2·6	10	27	4	0·37	-0·23	*	*	*	*
	Cirencester	55	25	45·3	33·7	39·5	- 1·9	9	31	5	1·03	+0·33	7·2	- 5·0	12	- 9
	Oxford	57	24	46·4	33·9	40·2	- 2·6	12	32	4	0·85	+0·30	10·1	- 2·7	17	- 5
5. ENGLAND, S.	London	58	31	48·1	36·6	42·4	- 1·1	25	15	5	1·29	+0·77	10·4†	+ 1·6†	17†	+ 3†
	North Foreland	57	35	48·3	39·4	43·9	- 0·4	24	7	5	1·07	?	*	*	*	*
	Strathfield Turgiss Ⓜ	55	24	46·2	33·7	40·0	- 2·4	12	32	4	1·31	+0·71	*	*	*	*
	Dungeness	55	37	49·1	40·1	44·6	- 0·3	26	5	5	0·91	+0·11	*	*	*	*
	Hastings (St. Leonards)	57	34	48·5	38·5	45·5	- 1·5	25	10	5	0·94	+0·16	17·3	+ 1·8	28	+ 2
	Southampton	56	29	47·5	35·8	41·7	- 2·8	15	26	5	1·30	+0·60	8·8	- 4·2	14	- 7
	Hurst Castle	55	38	48·9	41·1	45·0	- 0·5	25	3	5	0·72	+0·02	*	*	*	*
	Stowell Ⓜ	56	31	46·4	37·3	41·9	- 1·2	12	20	5	1·38	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	49	30	44·1	34·2	39·2	- 3·0	6	29	3	1·05	-1·09	*	*	*	*
	Glasgow	51	30	44·6	35·9	40·3	- 1·0	7	24	2	0·58	-0·30	7·6	+ 1·6	14	+ 3
	Ardrossan	52	31	45·7	36·0	40·9	- 2·6	10	24	2	0·79	-0·12	*	*	*	*
	Glenlee Ⓢ	51	26	46·7	35·3	41·0	+ 0·6	13	27	2	1·06	-0·41	*	*	*	*
	Douglas (Isle of Man)	53	32	47·7	41·1	44·4	+ 0·3	21	3	3	0·45	-0·66	7·9	- 6·3	13	-11
7. ENGLAND, N.W.	Stonyhurst	54	30	44·6	37·7	41·2	- 0·9	7	17	2	0·42	-0·66	10·2	- 0·2	17	1
	Blackpool Ⓜ	55	34	48·4	38·4	43·4	+ 0·5	25	10	3	0·28	-0·52	9·3	- 1·0	16	- 2
	Manchester	56	30	46·5	35·1	40·8	- 1·3	13	27	4	0·28	-0·54	4·9	?	8	?
	Liverpool Obsy. (Bidston)	55	31	46·4	37·3	41·9	- 1·8	12	20	3	0·20	-0·50	*	*	*	*
	Llandudno Ⓜ	56	30	48·2	36·4	42·3	- 2·9	26	16	3	0·97	+0·16	11·8	+ 1·5	20	+ 2
	Holyhead	55	39	48·7	41·3	45·0	- 1·2	24	2	3	0·34	-0·06	*	*	*	*
8. ENGLAND, S.W.	Llandovery	56	23	47·0	36·0	41·5	- 1·7	14	25	5	1·13	-0·06	*	*	*	*
	Pembroke	55	35	48·1	41·4	44·8	- 2·1	22	2	4	1·97	+1·03	6·2	- 7·6	10	-13
	Bristol (Montpelier)	56	31	46·1	37·4	41·8	- 1·8	11	19	5	1·37	?	*	*	*	*
	Arlington (N. Devon)	56	32	47·7	37·6	42·7	- 1·1	23	12	3	1·74	+0·26	*	*	*	*
	Cullompton Ⓜ	56	32	47·3	38·8	43·1	- 1·0	21	9	4	1·32	+0·30	5·2	- 5·8	9	- 9
	Falmouth	56	35	50·7	43·0	46·9	- 0·7	34	0	4	2·69	+1·41	3·7	-12·5	6	-20
	Plymouth	56	30	50·2	39·1	44·7	- 1·7	31	8	5	0·68	-0·17	9·4	- 3·8	15	- 7
	Prawle Point	55	39	49·9	42·4	46·2	- 0·1	29	0	3	0·47	-0·68				
9. IRELAND, N.	Malin Head	48	37	46·0	41·0	43·5	+ 0·4	15	3	3	0·76	?	*	*	*	*
	Londonderry	51	30	45·7	35·2	40·5	- 2·4	10	27	4	1·19	+0·20	*	*	*	*
	Edenfel (Omagh)	48	21	44·1	31·7	37·9	- 3·6	6	38	3	1·09	+0·24	*	*	*	*
	Belmullet	49	33	47·6	36·6	42·1	- 4·5	23	15	4	1·39	?	*	*	*	*
	Markree Castle	50	22	46·0	32·8	39·4	- 3·3	11	35	4	1·14	+0·32	14·8	+ 2·3	25	+ 3
	Brookeborough	50	22	46·1	33·8	40·0	- 1·4	11	32	2	1·26	+0·26	*	*	*	*
	Armagh	51	26	45·5	34·8	40·2	- 1·7	10	28	3	0·78	+0·11	13·4	+ 0·3	23	0
	Donaghadee	53	40	48·6	43·6	46·1	+ 2·4	29	0	3	0·32	-0·43	*	*	*	*
	Edgeworthstown	?50	26	?43·0	33·1	?38·1	?- 4·2	? 3	?32	2	0·39	-0·46	*	*	*	*
10. IRELAND, S.	Dublin	55	34	48·0	37·9	43·0	- 1·8	24	11	3	0·95	+0·37	17·2	+ 0·8	29	+ 1
	Parsonstown	54	26	46·4	34·0	40·2	- 2·9	12	31	2	0·45	-0·22	15·3	+ 0·6	26	+ 1
	Kilkenny	54	33	46·6	36·9	41·8	- 3·0	13	21	4	0·75	+0·13	*	*	*	*
	Waterford	55	31	46·9	37·6	42·3	- 3·7	21	12	4	1·13	+0·25	*	*	*	*
	Roche's Point	54	36	49·1	42·4	45·8	- 0·8	27	0	3	0·86	-0·23	*	*	*	*
	Valencia	57	33	50·6	39·4	45·0	- 2·7	32	7	5	0·82	-0·43	14·6	+ 0·6	24	+ 1
	Killarney	55	27	49·3	39·1	44·2	- 1·4	28	8	5	1·34	?	*	*	*	*
	Foynes	52	29	46·2	35·6	40·9	- 3·6	12	25	4	0·67	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	56	34	52·6	43·3	48·0	- 1·5	42	0	4	0·89	+0·01	*	*	*	*
	Jersey	57	35	51·9	41·6	46·8	- 1·2	35	1	6	1·40	?	16·1	+ 0·9	26	+ 2

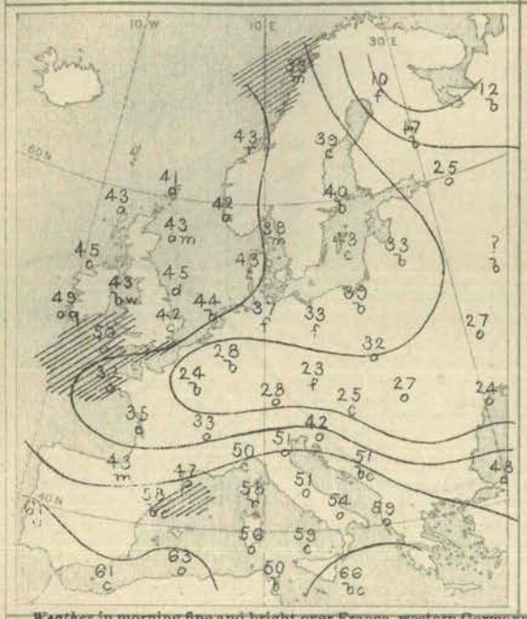
Stations marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

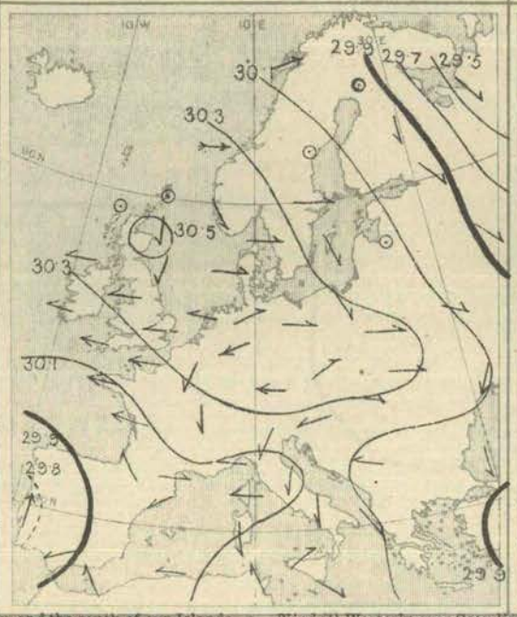
* An asterisk is inserted in all places for which the information is not usually received.

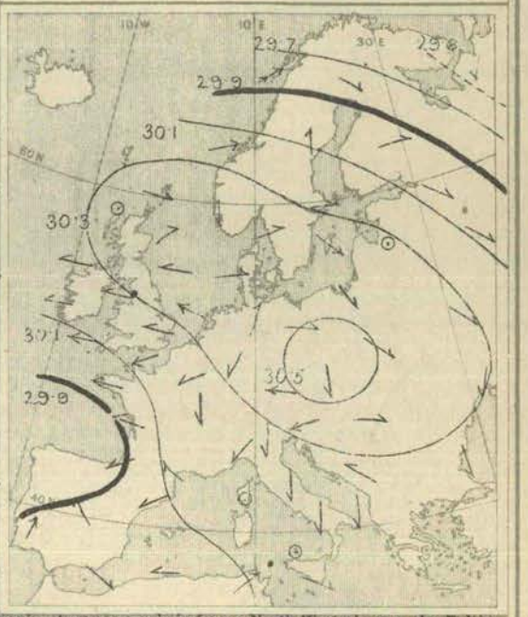
† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row) at the Kew Observatory, and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

Sunday, 12th November.

Temperature and Weather.	Barometer and Wind.	
8 a.m.	8 a.m.	6 p.m.







Weather in morning fine and bright over France, western Germany, and the south of our Islands, as well as over the Baltic Provinces and the northern half of Russia; very foggy over the south, east, and north of Germany, cloudy or overcast elsewhere. Considerable rain falling in the north-west of Norway and the extreme south of France later, and small quantities in the north-east of England; continuing dry elsewhere, foggy over north Germany, hazy in many parts of our Islands.

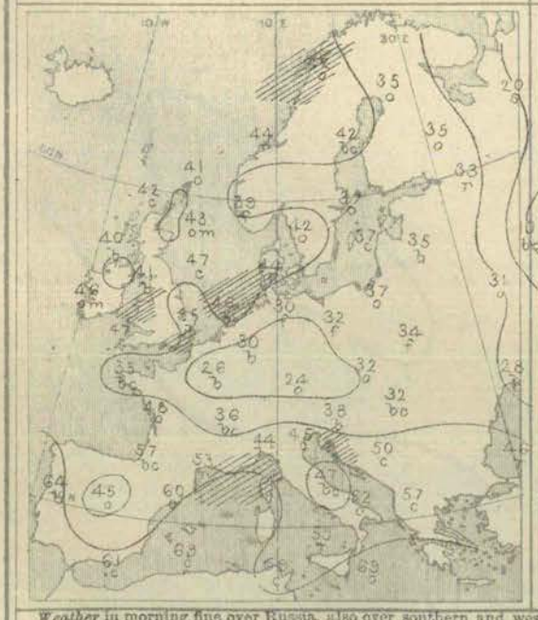
Temperature fallen a little over western Europe, risen somewhat over Germany. Morning readings highest, 60° and more in the extreme south only; exceeding 40° at most of the stations in our Islands, on the eastern shores of the North Sea and the southern shores of the Baltic. Lowest, (1) 5° Fahr. at Haparanda, 12° at Archangel, 25° at St. Petersburg; (2) 23° at Kharkov, 24° at Odessa and Nicolaieff, 27° at Kief; (3) 23° at Prague, 25° at Vienna, 26° at Lemberg; (4) 33° at Cambridge, 35° at Oxford. Rising to between 44° and 50° over the greater part of our Islands later, touching 52° at Scilly and Rochefort, 66° at Lisbon and at some Italian stations, 70° at Biarritz, and 75° in some parts of Algeria and Tunis.

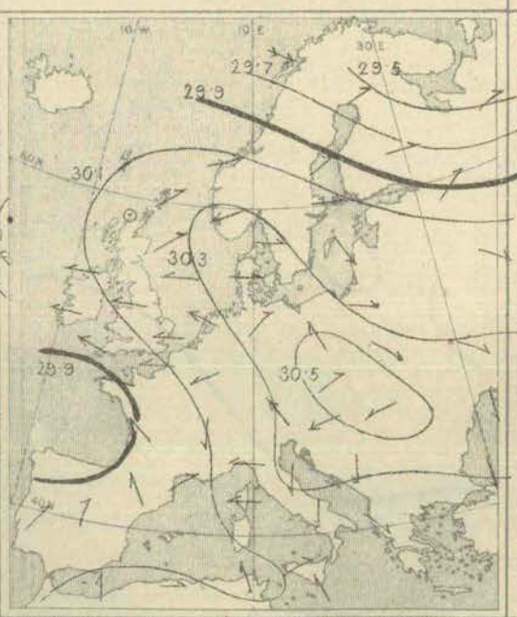
Wind (1) Westerly over Scandinavia, strong to a gale in force; North-Westerly over the Baltic and Russia, very light and variable over Scotland and the North Sea; (2) Easterly over England, Ireland, the Channel, and Bay of Biscay. Northerly to North-Easterly over France and the Mediterranean; (3) Southerly at Lisbon and over Algeria. Very little change later, beyond some increase in the force of the Easterly wind over our Islands.

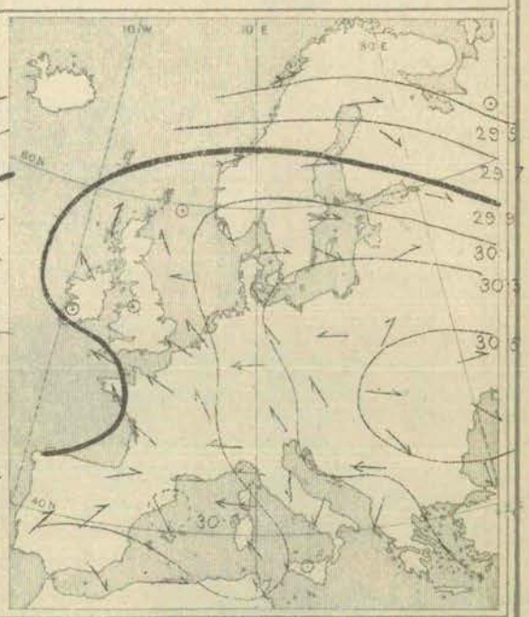
Barometer highest, 30·5 ins. and more to 30·3 ins. in a large anticyclone covering the greater part of our Islands, the North Sea, Germany, Denmark, and the southern half of Norway. Lowest, 29·5 ins. and less over the north-east of Russia; 29·8 ins. and less over Portugal and neighbouring parts of the Atlantic, and below 29·9 ins. over Asia Minor. Falling generally over the United Kingdom, France, and Scandinavia during the day, rising slightly at Lisbon.

Monday, 13th November.

Temperature and Weather.	Barometer and Wind.	
8 a.m.	8 a.m.	6 p.m.







Weather in morning fine over Russia, also over southern and western Europe, and the British Isles as a whole—foggy in some places, clear and bright in others; dull and foggy over central Europe, unsettled over northern Europe, with rain at Christiansund and St. Petersburg, snow at Archangel. Considerable rain in the north of Norway later, and large quantities in the south of France; smaller quantities in Italy, on our south-west coasts, and the coast of Brittany. Weather becoming very misty and foggy over Ireland, England, and north Germany.

Temperature changing fitfully. Morning readings highest, 69° at Algiers and Malta, 64° at Lisbon, above 50° at the extreme southern stations, and above 45° at most of the coast stations in our Islands. Lowest, (1) 10° at Moscow, 15° at Kharkov, 20° at Archangel, 25° at Odessa, 24° to 29° over south Germany, 26° to 33° over central France, 30° to 35° over central England. Rising to between 43° and 49° at our inland stations later, touching 55° at Nice and 68° at Biarritz, 73° at Algiers, 75° at Palermo and 79° at Sfax.

Wind (1) blowing a gale from West over the northern half of Norway, moderate from South-West over the north of Sweden, moderate to strong, North-Westerly, over the Baltic; (2) calm in Scotland, fresh South-Easterly to Easterly over Ireland, England, the Channel, Brittany, and the Bay of Biscay, South-Easterly over the south-west of France, Southerly over Spain; (3) anticyclonic airs prevalent over western Europe. Easterly breezes falling light over Ireland and England later, no material change elsewhere.

Barometer highest, 30·5 ins. and more to 30·2 ins. in an anticyclone lying mainly over central Europe, and spreading thence to all but the extreme western and northern countries. Lowest, 29·5 ins. and less over Lapland and the Kola Peninsula, with the White Sea, and below 29·9 ins. in a depression over the Bay of Biscay. Falling over western and northern Europe all day, depression in south-west moving northwards, anticyclone over Europe moving south-eastwards.

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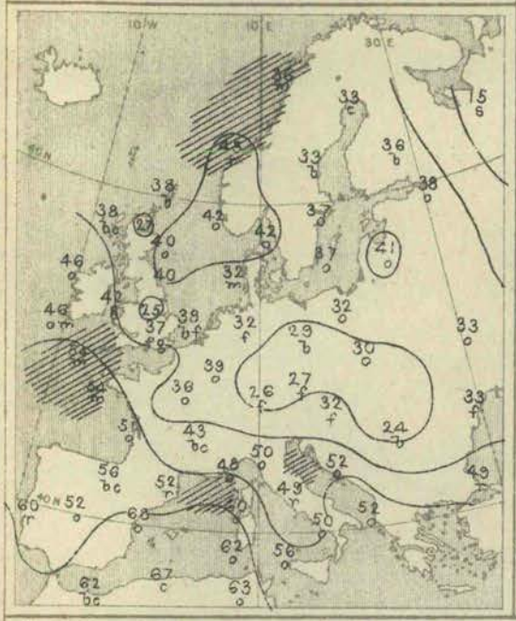
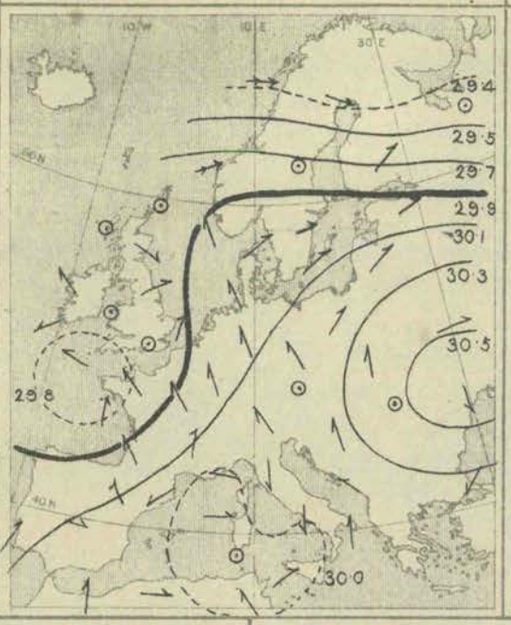
Tuesday, 14th November.

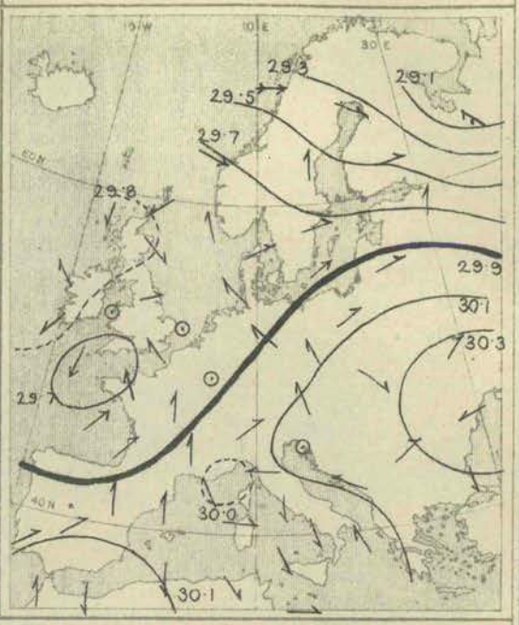
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine over Scotland, some parts of Sweden, north Germany, and Hungary, but, as a whole, very cloudy, with fog or mist at an unusually large number of stations. Rain falling at Lorient, Jersey, and Roches Point, at Perpignan, Rome, and Constantinople, also at Christiansund; snow at Archangel. Rain during day over Great Britain, France, and the Netherlands; amounts large in the north of France and the south and south-east of England, a considerable fall at Christiansund also.

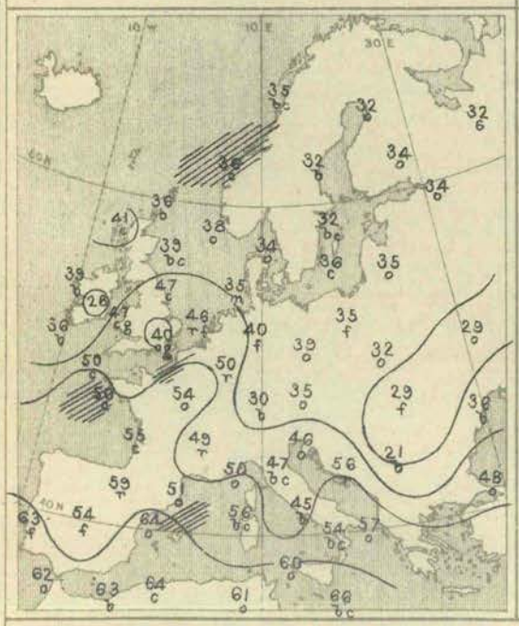
Temperature risen fast in the south of Russia and the northern half of France, changed little and irregularly elsewhere. Morning readings exceeding 60° at many of the Mediterranean stations, and exceeding 50° on the west coast of France, at Jersey, and at Scilly. Lowest, (1) 15° at Archangel; (2) 23° at Cracow, 24° at Hermanstadt, 26° at Munich, 27° at Prague, 28° at Münster, 29° at Berlin; (3) 25° at Loughborough, 27° at Wick, 30° at Aberdeen, 31° at Oxford, 33° at Cambridge. Rising later to between 39° and 45° over the northern parts of Great Britain, to 55° at Scilly, 57° at Brest and Nice, 68° at Biarritz, 70° or more at Palermo and over Algeria.

Wind Westerly over northern Europe and blowing a gale at Bodö and Christiansund; light and very variable over the British Islands, but mainly Easterly at our southern stations, South-Easterly over the west and north of France, and the Netherlands. An anticyclonic circulation of light airs prevailing over south-eastern Europe. No great change during day, except over the western part of the Channel, where a cyclonic circulation of moderate breezes was developed in evening.

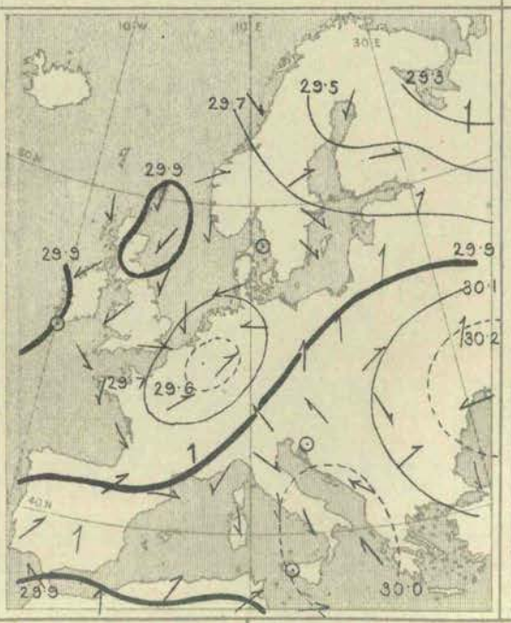
Barometer highest, 30·5 ins. and more over the south of Russia, and exceeding 30·0 ins. over the whole of south-eastern, central, southern, and south-western Europe. Lowest, 29·4 ins. and less over Lapland, the Kola Peninsula, and the White Sea, and below 29·8 ins. in a shallow depression having its centre somewhat to westward of Ushant. Latter disturbance moving east-north-eastwards up the Channel later, and growing slightly deeper.

Wednesday, 15th November.

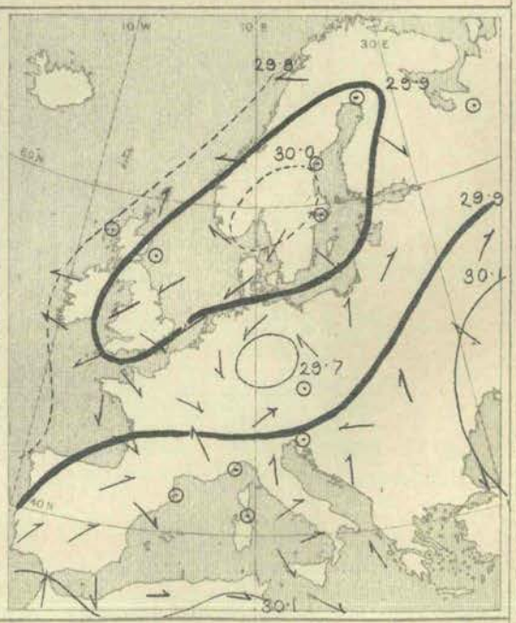
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright at most of the Scandinavian and Irish stations, as well as the greater part of Italy and south-eastern Europe; cloudy elsewhere, with rain at several of the southern French stations, at Lésina, and Odessa, snow at Archangel and Kuopio. Rain over the south-east of England, Belgium, and the west and north of Germany. Much rain falling during day over Germany and the east of France; weather improving over the British Islands as a whole, but clouds beginning to increase in the south-west of Ireland at night.

Temperature changing very fitfully; risen decidedly over France, the Netherlands, and Germany, fallen fast over Ireland. Morning readings highest, 66° at Malta, and exceeding 60° on the southern and western shores of the Mediterranean, exceeding 50° at most of the French stations. Lowest, (1) 21° at Hermanstadt, 26° at Cracow, 27° at Kharkov, 29° at Kiev and Lemberg; (2) 28° at Parsonstown. Rising decidedly over Ireland later, and the rise spreading eastwards. Daily maxima exceeding 70° over Spain and Sicily, and touching 75° to 77° in several parts of Algeria.

Wind very light as a whole; (1) Northerly to North-Westerly over Scandinavia, Southerly to South-Westerly on the eastern shores of the Baltic and over the north of Russia; (2) North-Easterly to Northerly over the United Kingdom, North-Westerly in the north and west of France, Southerly and South-Westerly over the east of France, South-Easterly and Southerly over Germany. Shifting to South-East and South over Ireland later, and freshening slightly at Valencia.

Barometer highest, 30·3 ins. and more to 30·1 ins. over the south of Russia, the Black Sea, Turkey, and Asia Minor, and exceeding 30·0 ins. over the Mediterranean and southern parts of Spain. Lowest, 29·3 ins. and less over the north of Russia, and 29·6 ins. and less in a shallow depression having its centre over Belgium; rather below 30·0 ins. in another very shallow system over the south of Italy, Sicily, and Malta. The Belgian depression moving eastwards to Germany later, but barometer beginning to fall again in Ireland, though rising over England and the North Sea.

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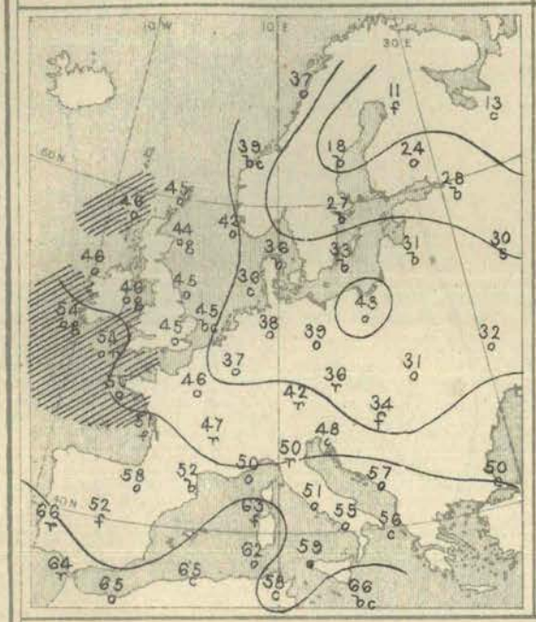
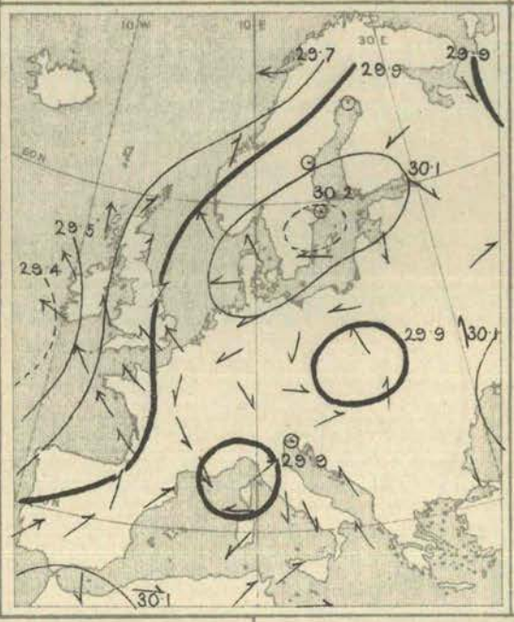
Thursday, 16th November.

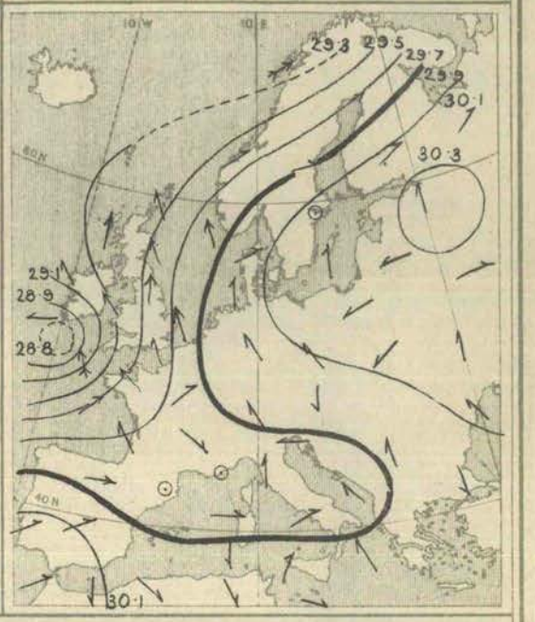
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over the Baltic, the south of Norway, and Denmark, as well as on the extreme east coast of England, cloudy or overcast elsewhere, and very rainy over central and southern Europe. Becoming very unsettled in the west of our Islands, with rain at Scilly and Malin Head. Rain falling later over all parts of the United Kingdom and the greater part of France—amounts collected being large over Brittany, at Cape Gris Nez, Belmullet, Ardrossan, Stornoway, and Aberdeen. A large fall over northern Italy also.

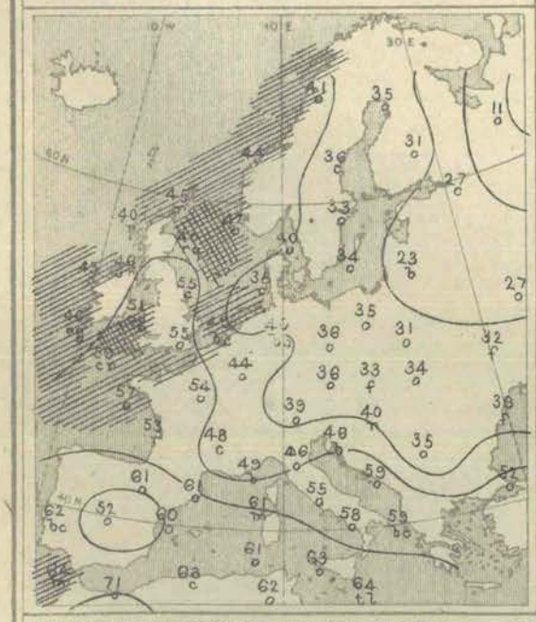
Temperature highest, 68° at Sfax, and exceeding 60° on the western side of the Mediterranean and in the south of Spain, exceeding 50° on our own south-west coasts; lower elsewhere. Lowest, (1) 11° at Uleaborg, 13° at Archangel, 18° at Hernösand, 27° at Stockholm, 28° at St. Petersburg; (2) 28° at Kharkov, 31° to 38° over Poland and Austria-Hungary, 36° at the Danish stations. Rising very quickly over Great Britain and the north of France later; falling fast in Ireland at night.

Wind light and very variable over the inland parts of Europe, anticyclonic at the Baltic, Sweden, and Denmark. South-Easterly to Southerly over the United Kingdom and the north and west of France—moderate in force at the eastern and southern stations, very strong and increasing in the west. Blowing very hard from the Southward over the Irish Channel, and also on the eastern coasts of Great Britain later, and shifting to the North-Westward subsequently in the west of Ireland.

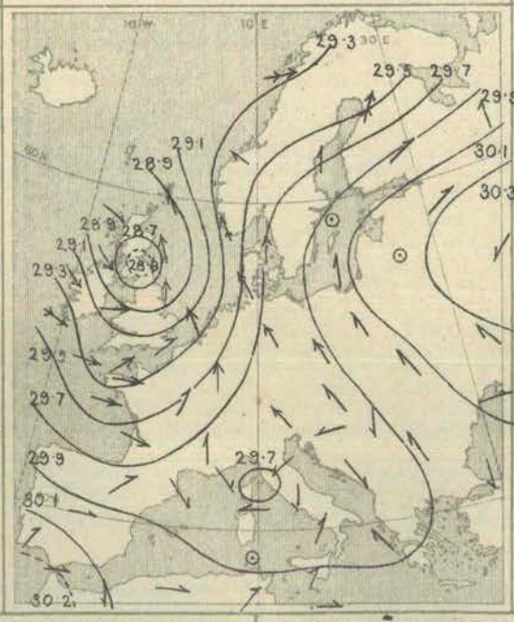
Barometer highest, 30·2 ins. and more to 30·1 ins. over the south of Russia; 30·2 ins. to 30·0 ins. over Sweden, the Baltic, and the eastern half of the North Sea, and 30·1 ins. to 30·0 ins. over Algeria and the southern half of Spain. Lowest, about 29·4 ins. in the extreme south-west of Ireland, and below 29·9 ins. in shallow depressions over central Europe and the south-east of France. A deep depression reaching the south of Ireland from the south-westward later, and advancing quickly to the north-eastward during the night; becoming still deeper in its journey.

Friday, 17th November.

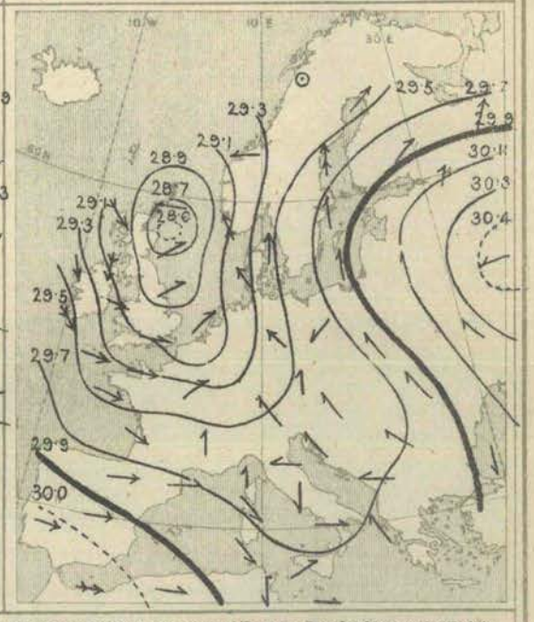
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine in the extreme south of Europe, cloudy or overcast almost everywhere else; quite dry, as a whole, over Russia, Germany, and south-eastern Europe, extremely unsettled over all the north-western countries, especially squally and rainy over the British Islands. Rain falling later in all parts of western Europe, hail in the west and south-west of our Islands and over Brittany; amounts, 1·0 in. at Christiansund, 0·8 in. at Nairn; heavy falls in Italy also, and 1·1 ins. at Palermo.

Temperature changing very suddenly over western Europe. Morning readings exceeding 60° on the Spanish coasts and the southern side of the Mediterranean, and ranging from 50° to 55° over the greater part of France and England, but below 50° over Ireland, Scotland, and Norway. Lowest, 11° at Archangel, 23° at Riga, 27° at St. Petersburg, Moscow, and Kharkov, 31° at Warsaw, and below 40° over central Europe generally. Touching 58° over the south-east of England during the day, and 60° at Paris, but falling quickly later. Maxima 77° at Palermo, 70° to 75° over Algeria and the south-west of France.

Wind (1) light from between East and South-East over central Europe, Southerly over the Baltic, fresh to a gale from South and South-West over Scandinavia; (2) well-defined cyclonic circulation of gales and strong winds over the British Islands and their neighbourhood—their direction being North-Westerly in the west, Westerly in the south, Southerly in the east, and South-South-Easterly in the north. Severe North-Westerly and Northerly gales becoming general at our western and northern stations later, but wind falling light from South-West in the north-east and east of England.

Barometer highest, (1) 30·3 ins. and more to 30·0 ins. over Russia, the Baltic, and Poland; 30·2 ins. and more to 29·8 ins. over the Spanish Peninsula, Algeria, and the southern parts of the Mediterranean. Lowest, 28·6 ins. and less in a deep depression over the west of Scotland, and below 29·4 ins. in the north of France. Shallow depression over Corsica. Depression in north-west moving north-eastwards to the Moray Firth by 6 p.m., but subsequently moving south-eastwards to the North Sea. Secondary disturbances appearing in most other parts of the Kingdom.

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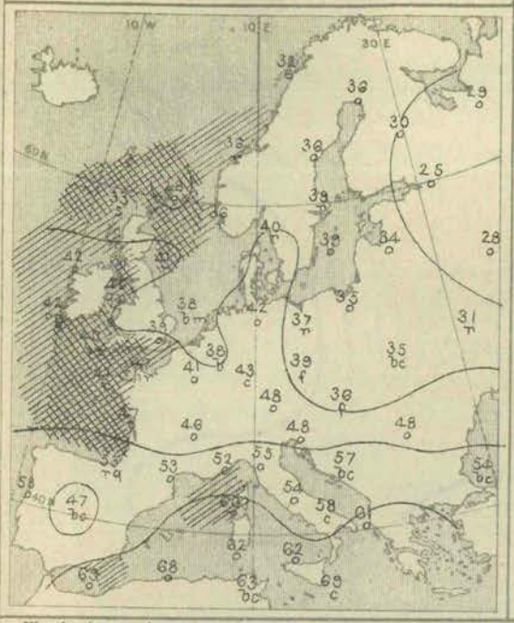
Saturday, 18th November.

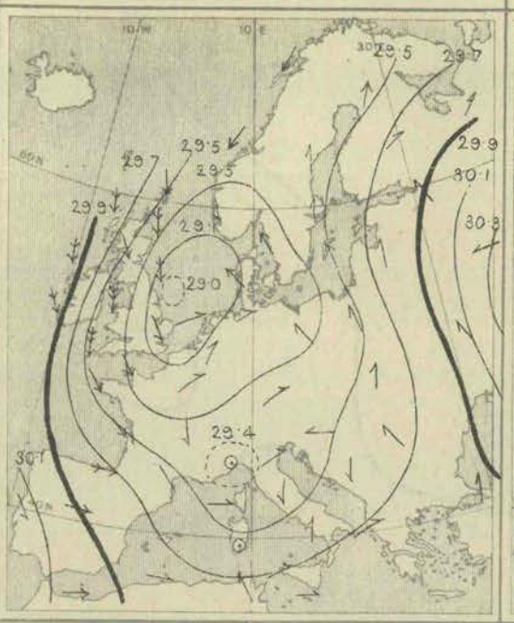
Temperature and Weather.

8 a.m.

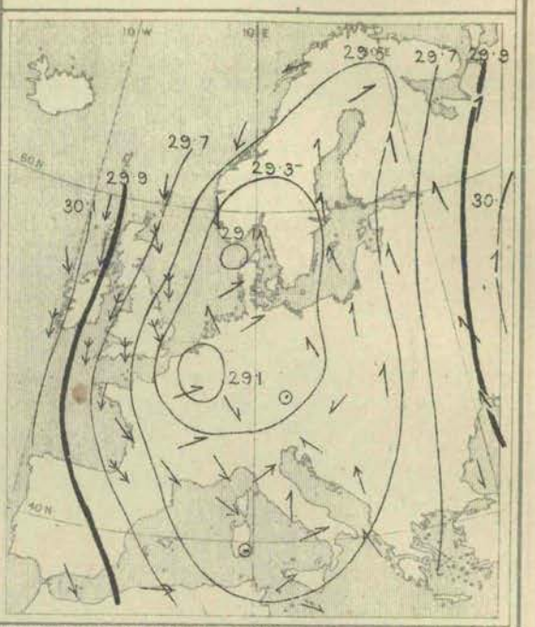


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning extremely rough and stormy over all the northern and western parts of the British Isles, and becoming so on the coasts of Brittany and the west of France, with snow, hail, and rain squalls in many places; comparatively quiet in the east and south of England and on the eastern shores of the North Sea, quiet over the Baltic, eastern, central, and southern Europe. Rough weather spreading over the east and south-east of England later, and continuing with great severity in the west and north.

Temperature fallen fast all over our Islands and France, risen a little over central Europe. Morning readings highest, 60° and more over the southern side of the Mediterranean, 50° and more over southern Europe, and 40° or more on our western and south-western coasts; below 40° elsewhere. Lowest, 25° to 30° over Russia, 28° at Sumburgh Head, 32° at Bodo, 33° to 35° on the Scotch coasts, as well as over Poland, 39° over central England. Changing very irregularly over England later, but falling as a whole—frost at night.

Wind Northerly over all our western and northern districts, and blowing a severe gale (force 12 at Holyhead, 11 at Scilly and Wick); North-Westerly, a gale, and increasing on the coasts of Brittany, Westerly, a gale, at Biarritz; South-Westerly, light, on the coasts of Norfolk, Kent, and Holland, South-Easterly, moderate to strong, in Denmark and the south of Norway and over the Baltic. Wind light over south-eastern, eastern, and central Europe. Heavy Northerly gale extending to east and south of England and north of France later—blowing unusually hard in the squalls; strong North-Westerly gale over Bay of Biscay.

Barometer highest, 30·3 ins. and more to 29·9 ins. over Russia, 30·1 ins. and more to 29·9 ins. over the south-western half of Spain, and 29·9 ins. and more over the west of Ireland. Lowest, 29·0 ins. and less in a deep and complex depression over the North Sea and east of England, and below 29·4 ins. in the south-east of France. Depression moving south-eastwards later, and becoming still more complex. Barometer rising fast but very unsteadily over the United Kingdom; falling at times in some localities.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force is indicated thus: ⇛ = a heavy gale; → = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze: and ⊙ = a calm. In the left-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Germany, Sweden, and Norway, and 7 a.m. in France, Algeria, Italy, Austria, and Russia; that for 6 p.m. is prepared from observations made at 6 p.m. in the British Islands and France, 7 p.m. in Algeria, 8 p.m. in Sweden and Norway, Germany, and Austria, and 9 p.m. in Russia, Belgium, and Italy. The time indicated in each case is the standard time for each country.

GENERAL NOTES.

At the beginning of this week a large high-pressure area spread from the neighbourhood of Iceland, over Great Britain and the North Sea, to central Europe. In it pressure ranged from 30·6 ins. and more to 30·1 ins., and the only low-pressure systems of which there was any trace were situated, one over the north-east of Russia, the other to the westward of Portugal. Much fog prevailed over Ireland and England during the next day or two.

The high-pressure system moved steadily to the south-eastward; a shallow depression advanced east-north-eastwards and eastwards up the English Channel and to Germany during Tuesday and Wednesday, and caused a great deal of rain in those regions, but in the north the weather continued fair.

The next change was much more serious. A deep depression arrived off the south of Ireland on Thursday evening, and, moving north-eastwards, reached the Moray Firth in 24 hours. A sudden alteration then ensued, the storm-centre moved south-eastwards, and Northerly gales of unusual violence spread over the British Islands, the North Sea, and western Europe, accompanied by snow and cold rain. The wind velocity was great everywhere, but altogether exceptional at Holyhead, where the anemometer registered more than 1800 miles of wind in 24 hours; and, in the one hour, upwards of 85 miles were recorded. The duration of the gale, also, was very great, for on Saturday night it was still blowing on all the British coasts; in London the maximum occurred on Saturday evening.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 272.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	2·9	?	5	?	EASTBOURNE	16·4	?	27	?
OSWALDKIRK (Yorkshire)	11·0	?	20	?	TENBY	8·3*	?	14*	?
WORKSOP	8·3	− 3·2	14	− 6	NEWQUAY	10·0	?	16	?
THURCASTON (Leicestershire)	13·2	+ 1·6	22	+ 2	TORQUAY	3·2*	?	5*	?
MARGATE	23·9	?	39	?	ARLEY COTTAGE (County Cavan)	17·0	?	29	?
WESTBOURNE (Sussex)	9·5*	?	16*	?	GUERNSEY				
BRIGHTON	15·8	?	26	?					

* The values at Westbourne, Tenby, Torquay and Guernsey are obtained by Jordan's Photographic Recorder.

WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; R. H. SCOTT, F.R.S., SECRETARY.

By whom Subscriptions, payable in advance, can be received.

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VOL. X. No. 47.] *Third Series.* WEEK ENDING SATURDAY, 25TH NOVEMBER, 1893. [*Price 6d.* *Annual Subscription post paid*, £1 10*s.* 0*d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871-90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the twenty-five years 1866-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the ten years 1881-90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

	DISTRICTS. (See p. 278.)	Observed during the Week. Highest.	Observed during the Week. Lowest.	Averages of Daily Maxima.	Averages of Daily Minima.	Averages of Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	Accumulated. From January 1st, 1893. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	52	26	42·8	32·4	37·6	3 below.	2	−13	34	+15	2330	+485	622†	− 6
	1. SCOTLAND, EAST	52	20	42·2	31·5	36·9	3 below.	1	−16	37	+13	2617	+287	700	+ 29
	2. ENGLAND, N.E.	52	27	44·3	33·8	39·1	2 below.	6	−13	31	+15	2914	+417	529	− 30
	3. ENGLAND, EAST	51	26	44·5	33·5	39·0	2 below.	7	−14	32	+16	3393	+503	635†	− 3
	4. MIDLAND COUNTIES	52	25	43·5	32·2	37·9	3 below.	4	−17	36	+17	3464	+637	634	− 10
	5. ENGLAND, SOUTH	52	27	44·2	33·3	38·8	4 below.	6	−24	32	+20	3708	+554	448	− 17
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	53	25	44·8	34·3	39·6	2 below.	8	−13	29	+17	2866	+454	471	− 5
	7. ENGLAND, N.W.	52	28	44·1	35·2	39·7	3 below.	6	−16	26	+15	3343†	+719	391	− 65
	8. ENGLAND, S.W.	53	26	45·8	34·8	40·3	4 below.	11	−24	28	+22	3620	+661	308	− 34
	9. IRELAND, NORTH	54	22	45·1	35·5	40·3	1 below.	9	−14	25	+11	3100	+525	362	− 52
	10. IRELAND, SOUTH	54	25	45·8	35·2	40·5	4 below.	11	−22	26	+16	3492	+560	257	− 59
	—CHANNEL ISLANDS	53	35	48·2	38·7	43·5	4 below.	24	−26	9	+ 8	4201	+812	79	− 44

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 278.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the mean for the Week.	Rainfall. From Jan. 1st, 1893. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	Bright Sunshine. From January 1st, 1893. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of ins.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	5	11	2 less.	220	+ 2	46·8	+ 3·1	2	− 3	5	− 6	984	−142	24	− 3
	1. SCOTLAND, EAST	5	6	2 less.	175	− 5	24·6	− 4·3	8	− 3	16	− 3	1339	+ 35	32	+ 1
	2. ENGLAND, N.E.	6	7	0 (average)	154	−13	19·0	− 5·0	9	0	17	+ 1	1516	+315	37	+ 8
	3. ENGLAND, EAST	5	11	5 more.	151	−13	18·8	− 4·9	9	− 6	15	− 8	1772	+308	43	+ 7
	4. MIDLAND COUNTIES	4	4	2 less.	143	−19	17·8	− 8·3	11	0	20	+ 1	1668	+361	41	+ 9
	5. ENGLAND, SOUTH	3	4	3 less.	142	−15	20·7	− 4·4	10	0	17	+ 1	1815	+398	44	+ 10
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	4	9	4 less.	175	−14	35·4	− 9·6	14	+ 5	25	+ 9	1505	+219	36	+ 5
	7. ENGLAND, N.W.	5	9	1 more.	165	−10	27·1	− 4·8	9	+ 1	16	+ 2	1468	+194	35	+ 4
	8. ENGLAND, S.W.	4	6	4 less.	151	−31	28·9	− 7·6	22	+12	37	+ 19	1899	+369	46	+ 9
	9. IRELAND, NORTH	4	6	3 less.	188	−16	29·9	− 2·8	17	+ 6	29	+ 9	1325	+135	32	+ 3
	10. IRELAND, SOUTH	3	3	6 less.	165	−22	27·0	− 3·1	14	+ 1	24	0	1471	+ 87	36	+ 2
	—CHANNEL ISLANDS	6	6	3 less.	163	−31	24·8	− 5·3	10	− 1	16	− 2	2212	+415	54	+ 10

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather was exceedingly changeable, with frequent showers in most districts. Severe Northerly gales occurred over the United Kingdom generally at the commencement of the week, and slight gales on one or two subsequent occasions.

Temperature was below the mean in all districts, the deficit being least (one degree) in Ireland N., and greatest (four degrees) in England S. and S.W., Ireland S., and the Channel Islands. The highest readings were observed, as a rule, on the 25th, when the thermometer rose to between 51° and 53° in most districts and to 54° in Ireland. The lowest readings, which occurred at various times in different parts of the country, ranged from 20° in Scotland E., and 22° in Ireland N., to 28° in England N.W., and to 35° in the Channel Islands.

Rainfall was less than the mean in most districts, but about equal to it in England N.E., and in excess of the normal in England E. and England N. W. Snow fell in many parts of the United Kingdom on the 19th, and again in several of the western and northern districts on the 22nd or 23rd.

Bright Sunshine was in excess of the mean in most of the "Grazing" districts, but about equal to it or a little below the mean in the "Wheat producing" districts. The percentage of the possible duration ranged from only 5 in Scotland N., to 25 in Scotland W., 29 in Ireland N., and 38 in England S.W.

Barometer and Wind.—The deep depression which was passing away from our Islands at the close of last week, subsequently travelled south-eastwards across central Europe, and in its rear an anticyclone spread over us from the Atlantic. The severe Northerly gales, therefore, subsided, and for a short time fine weather prevailed generally. Later in the week, however, the conditions were affected by two other disturbances, one of which travelled south-eastwards across Scandinavia on the 22nd, while the other passed eastwards across Scotland on the 25th. The former depression occasioned slight gales from the North-Westward or Northward on many parts of our northern coasts, while the latter produced a considerable increase of wind from the South-Westward in the western and southern parts of the Kingdom.

† This value has been altered slightly owing to the receipt of further information for a preceding week.

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II.—DATA from which the SUMMARY on page 277 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		*	*	*	*	*	*				Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	47	26	42·1	31·6	36·9	− 3·9	0	37	6	0·57	−0·40	*	*	*	*
	Stornoway	48	28	42·4	32·7	37·6	− 3·1	1	33	5	0·96	−0·23	5·0	−2·8	10	− 6
	Wick	47	27	41·0	32·3	36·7	− 3·3	0	37	6	0·78	+0·11	*	*	*	*
	Lairg Ⓢ												*	*	*	*
	Glencarron Ⓢ	47	26	42·4	31·6	37·0	− 2·0	1	37	6	2·50	+0·26	*	*	*	*
	Fort Augustus Ⓢ	49	28	43·1	32·5	37·8	− 2·0	3	34	5	0·57	−0·45	0·4	?	1	?
	Fort William Ⓢ	52	29	45·6	33·6	39·6	− 1·1	10	32	4	1·20	−0·64	1·5	?	3	?
1. SCOTLAND, E.	Nairn	48	27	42·6	32·7	37·7	− 2·1	2	33	5	0·62	+0·09	*	*	*	*
	Aberdeen	46	28	41·3	32·9	37·1	− 3·1	0	34	6	0·85	+0·13	7·4	− 3·6	14	− 8
	Braemar Ⓢ	44	20	38·6	27·3	33·0	− 3·7	0	63	6	0·93	+0·04	5·3†	?†	10†	?†
	Ochtertyre Ⓢ	50	25	43·7	31·3	37·5	− 1·5	5	39	3	0·10	−0·91	*	*	*	*
	Leith	52	29	44·6	32·9	38·8	− 2·8	7	34	3	0·20	−0·30	*	*	*	*
	Marchmont Ⓢ	49	26	42·1	31·9	37·0	− 2·0	0	35	5	0·69	−0·11	11·0	?	21	?
2. ENGLAND, N.E.	Alnwick Castle	50	28	43·9	35·9	39·9	− 0·7	5	23	7	0·38	−0·40	*	*	*	*
	Durham	50	28	42·4	32·4	37·4	− 2·4	1	34	7	0·28	−0·44	10·1	− 1·6	19	− 3
	Shields	52	27	44·9	32·7	38·8	− 2·6	8	35	4	0·34	−0·32	*	*	*	*
	Scarborough Ⓜ	49	30	45·2	35·6	40·4	− 1·6	9	25	5	1·24	+0·55	*	*	*	*
	York	50	27	44·4	31·3	37·9	− 2·9	7	39	6	0·78	+0·28	10·1	+ 2·1	18	+ 3
	Spurn Head	48	30	44·9	35·1	40·0	− 2·2	8	26	5	0·33	+0·38	*	*	*	*
3. ENGLAND, E.	Hillington Ⓜ	49	30	44·5	35·2	39·9	− 0·5	7	26	6	0·96	+0·33	7·5	− 3·3	13	− 6
	Yarmouth	48	28	44·6	34·3	39·5	− 2·5	7	29	7	1·31	+0·63	*	*	*	*
	Geldeston	50	26	44·9	34·5	39·7	− 2·1	8	28	7	1·33	+0·68	8·3	− 5·1	14	− 9
	Cambridge	51	27	45·0	31·3	38·2	− 2·6	8	40	3	0·75	+0·28	7·3	− 5·7	13	− 9
	Rothamsted	51	28	43·5	32·0	37·8	− 2·7	4	36	4	0·95	+0·33	10·8	?	19	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	50	27	44·6	32·4	38·5	− 2·1	7	35	5	0·35	−0·16	*	*	*	*
	Loughborough	50	28	44·0	32·4	38·2	− 2·8	6	35	5	0·31	−0·19	*	*	*	*
	Stamford (Ketton Hall)	50	28	44·1	32·6	38·4	− 3·4	6	35	3	0·41	−0·19	*	*	*	*
	Cheadle Ⓜ	49	25	41·0	31·5	36·3	− 3·7	0	40	5	0·60	−0·10	*	*	*	*
	Churchstoke Ⓜ	51	25	42·0	32·8	37·4	− 3·1	0	32	5	0·38	−0·42	4·7	− 5·3	8	−10
	Hereford Ⓜ	52	28	45·0	32·6	38·8	− 3·0	8	35	4	0·38	−0·22	*	*	*	*
	Cirencester	49	27	43·9	31·3	37·6	− 2·6	5	39	5	0·41	−0·29	19·3	+ 8·5	33	+14
	Oxford	50	28	43·7	31·9	37·8	− 3·7	5	37	3	0·41	−0·14	15·7	+ 5·1	27	+ 8
5. ENGLAND, S.	London	50	28	44·0	32·4	38·2	− 4·1	6	35	2	0·42	−0·11	7·1†	+ 0·1†	12†	+ 1†
	North Foreland	50	31	44·3	35·1	39·7	− 5·1	6	26	4	0·77	?	*	*	*	*
	Strathfield Turgiss Ⓜ	50	27	43·5	31·7	37·6	− 3·4	4	37	4	0·28	−0·32	*	*	*	*
	Dungeness	49	28	44·3	33·1	38·7	− 5·0	6	33	4	0·41	−0·37	*	*	*	*
	Hastings (St. Leonards)	50	30	43·5	34·8	39·2	− 4·4	4	27	5	0·71	−0·04	8·3	− 4·9	14	− 9
	Southampton	52	28	45·1	33·7	39·4	− 3·9	9	31	2	0·30	−0·40	18·3	+ 7·5	31	+12
	Hurst Castle	50	29	45·0	32·7	38·9	− 5·5	8	35	2	0·11	−0·58	*	*	*	*
	Stowell Ⓜ	51	28	44·1	33·0	38·6	− 3·4	6	33	3	0·16	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	53	28	45·9	32·9	39·4	− 2·1	11	35	5	2·13	−0·06	*	*	*	*
	Glasgow	51	27	43·8	34·3	39·1	− 1·2	5	29	3	0·29	−0·58	10·4	+ 5·4	20	+11
	Ardrossan	52	28	45·0	33·1	39·1	− 3·3	8	34	5	0·41	−0·49	*	*	*	*
	Glenlee Ⓢ	51	25	44·3	33·6	39·0	− 0·5	6	31	3	0·69	−0·70	*	*	*	*
	Douglas (Isle of Man)	51	32	45·2	37·6	41·4	− 1·8	9	18	5	1·18	+0·07	16·7	+ 3·9	30	+ 8
7. ENGLAND, N.W.	Stonyhurst	48	28	41·7	32·3	37·0	− 4·0	0	35	5	1·94	+0·86	15·2	+ 6·2	27	+11
	Blackpool Ⓜ	49	30	44·6	35·0	39·8	− 1·9	7	26	3	0·20	−0·60	10·9	+ 2·2	19	+ 3
	Manchester	49	28	42·3	32·6	37·5	− 3·5	1	33	6	1·36	+0·56	6·1	?	11	?
	Liverpool Obsy. (Bidston)	50	31	44·7	34·0	39·4	− 3·2	8	30	6	0·67	−0·01	*	*	*	*
	Llandudno Ⓜ	50	32	44·3	38·4	41·4	− 2·8	6	15	5	0·90	+0·08	4·4	− 4·6	8	− 8
	Holyhead	52	34	47·1	38·6	42·9	− 2·5	21	10	4	0·44	−0·44	*	*	*	*
8. ENGLAND, S.W.	Llandovery	52	26	45·3	32·1	38·7	− 3·5	9	37	5	1·17	+0·01	*	*	*	*
	Pembroke	52	31	47·0	36·4	41·7	− 4·3	14	23	4	0·54	−0·41	17·4	+ 5·2	30	+ 9
	Bristol (Montpelier)	51	30	44·7	34·3	39·5	− 4·5	8	29	3	0·38	?	*	*	*	*
	Arlington (N. Devon)	51	30	44·7	34·3	39·5	− 3·3	8	29	4	0·63	−0·83	*	*	*	*
	Cullompton Ⓜ	52	29	46·0	34·8	40·4	− 2·5	11	28	4	0·39	−0·48	21·3	+12·1	36	+20
	Falmouth	53	33	47·1	37·4	42·3	− 4·5	21	13	5	1·14	−0·13	26·1	+11·9	44	+20
	Plymouth	52	31	45·3	36·4	40·9	− 4·5	9	22	3	0·36	−0·42	26·2	+14·6	44	+23
	Prawle Point	53	28	46·4	32·6	39·5	− 5·9	12	36	3	0·20	−0·58	*	*	*	*
9. IRELAND, N.	Malin Head	50	36	46·0	39·7	42·9	+ 0·6	16	6	4	0·43	?	*	*	*	*
	Londonderry	52	31	45·7	37·1	41·4	− 0·4	10	20	6	0·86	−0·13	*	*	*	*
	Edenfel (Omagh)	51	24	44·3	32·0	38·2	− 3·8	6	37	4	0·55	−0·30	*	*	*	*
	Belmullet	54	35	47·7	38·7	43·2	+ 2·3	22	9	6	0·70	?	*	*	*	*
	Markree Castle	52	24	45·9	35·7	40·8	− 0·9	11	25	5	0·65	−0·15	15·9	+ 4·9	28	+ 7
	Brookeborough	50	22	44·4	33·1	38·8	− 1·4	7	33	4	0·94	−0·08	*	*	*	*
	Armagh	51	26	43·9	33·1	38·5	− 2·4	5	32	3	0·38	−0·32	17·2	+ 5·0	31	+ 8
	Donaghadee	50	32	45·9	38·1	42·0	− 0·8	11	11	5	0·38	−0·37	*	*	*	*
	Edgeworthstown	?50	28	? 42·5	32·1	? 37·3	?− 4·2	? 1	?35	3	0·33	−0·53	*	*	*	*
10. IRELAND, S.	Dublin	53	32	45·3	36·8	41·1	− 2·8	9	21	4	0·21	−0·41	12·9	− 2·1	23	− 3
	Parsonstown	52	25	45·0	30·6	37·8	− 4·4	8	42	3	0·39	−0·30	12·4	− 0·5	22	− 1
	Kilkenny	52	30	44·0	34·1	39·1	− 4·7	6	29	3	0·21	−0·43	*	*	*	*
	Waterford	53	32	45·7	34·9	40·3	− 4·7	10	27	3	0·26	−0·66	*	*	*	*
	Roche's Point	53	33	45·9	37·7	41·8	− 4·0	11	18	1	0·20	−0·93	*	*	*	*
	Valencia	54	28	48·0	37·7	42·9	− 4·0	24	12	4	0·36	−0·87	16·4	+ 4·5	28	+ 7
	Killarney	53	25	45·6	33·7	39·7	− 5·1	10	32	4	0·49	?	*	*	*	*
	Foynes	54	31	46·9	36·3	41·6	− 2·2	14	23	4	0·37	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	53	35	48·7	38·7	43·7	− 5·0	26	9	4	0·28	−0·64	*	*	*	*
	Jersey	53	35	47·7	38·6	43·2	− 3·8	23	10	7	0·96	−0·01	12·3	− 0·7	20	− 2

Stations marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

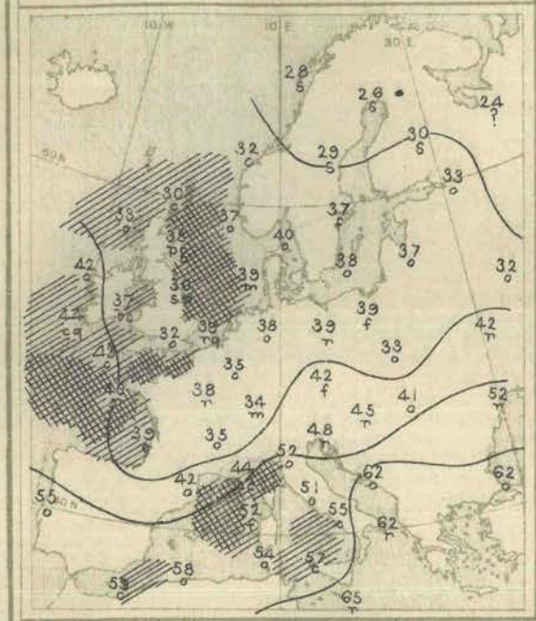
* An asterisk is inserted in all places for which the information is not usually received.

† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row at the Kew Observatory, and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

Sunday, 19th November.

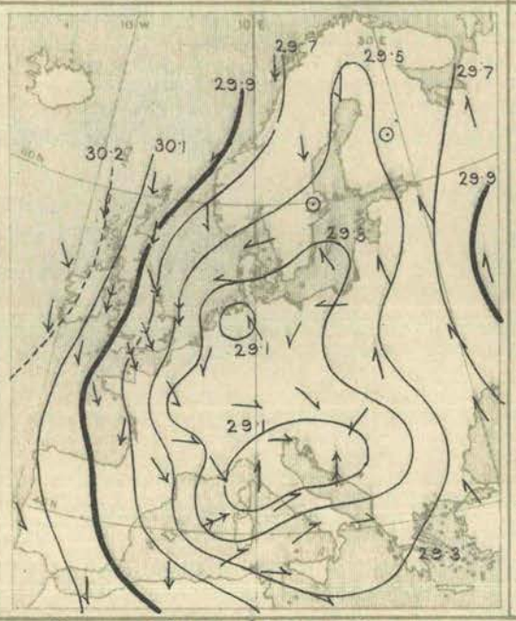
Temperature and Weather.

8 a.m.

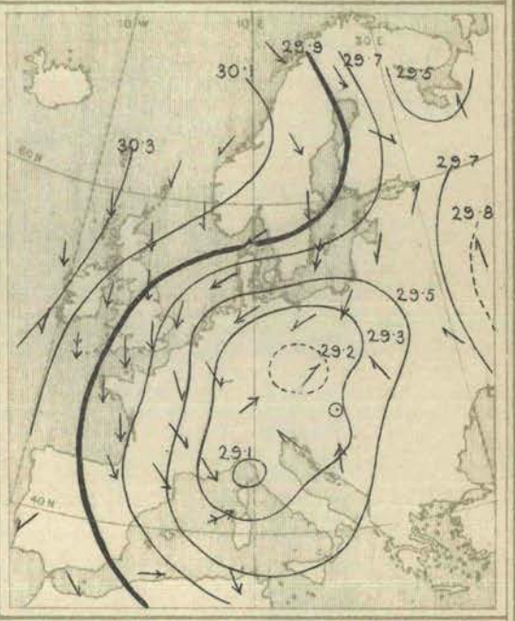


Barometer and Wind.

8 a.m.



6 p.m.



Weather squally and showery in nearly all parts of western Europe, with snow or hail in the eastern parts of Great Britain. Dull in nearly all other parts of the Continent, with fog at several of the German stations, rain over Austria, northern Italy, and the south of Russia, and snow in Sweden and Finland. Some improvement taking place later in the west and north of our Islands, and also in Scandinavia and Denmark, but weather remaining very unsettled elsewhere, with heavy rain in many parts of the Continent, and with snow at several of the French stations. Thunderstorm occurring at Biarritz.

Temperature fallen in all but the eastern countries—briskly over England and France. Morning readings highest, 65° at Malta, 62° at Lesina, Brindisi, and Constantinople, and 59° at Oran; above 50° at several of the Mediterranean stations. Lowest, (1) 24° at Archangel, 26° at Haparanda, and 28° at Bodö; (2) 29° at Oxford, and 30° at Loughborough and Cambridge; (3) 32° at Limoges, and 33° at Warsaw, Cracow and Munich. Daily maxima below 40° at several of our own northern stations, as well as in some parts of central France, but thermometer exceeding 50° in most parts of southern Europe, and reaching 59° at Lisbon.

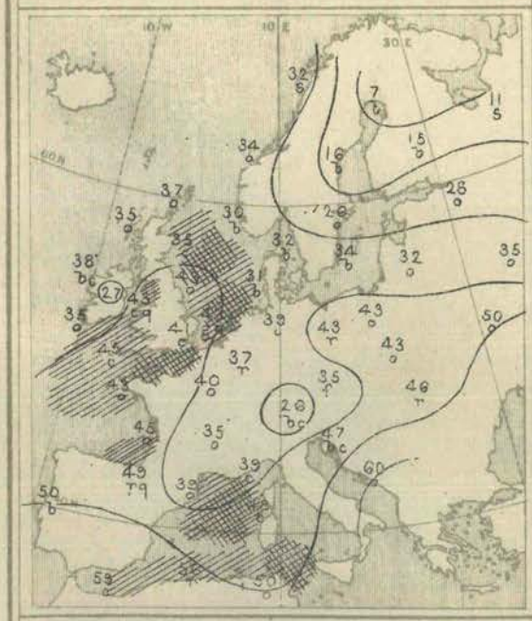
Wind blowing a fresh to strong gale from the Northward over our Islands and the north of France; very strong from the same quarter in most other parts of western Europe. Light and variable over Germany and Austria; moderate from the South-Westward in Italy; light from the Southward and South-Eastward over Russia and Poland. Gale moderating somewhat later over our Islands, but increasing again at night on our east and south-east coasts.

Barometer highest, 30·2 ins. and upwards in a large anticyclone lying to the westward of our Islands; 29·9 ins. and upwards over central Russia. Lowest, 29·1 ins. to 29·3 ins. in a complex depression lying over the more central parts of Europe; clearly defined minima reported over north Germany and the northern parts of Italy. Anticyclone spreading eastwards later, depression moving away steadily to the south-eastward.

Monday, 20th November.

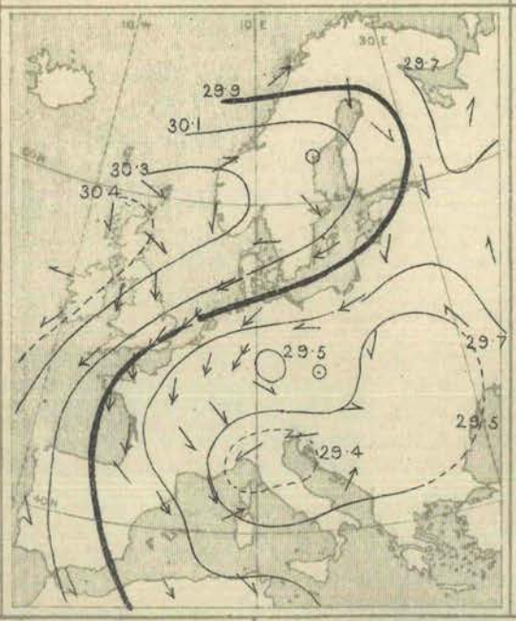
Temperature and Weather.

8 a.m.

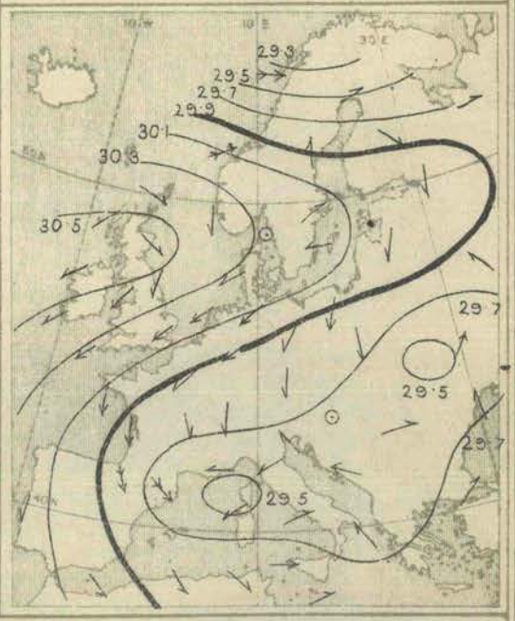


Barometer and Wind.

8 a.m.



6 p.m.



Weather fine in many parts of our Islands, but squally and showery in the east and south-east of England. Fine and bright over the greater part of Scandinavia, Finland, Denmark, and the Baltic; dull in most of the other Continental countries, with rain in many parts of France, Belgium, and Germany, and with snow at Limoges and Munich. Snow or hail showers falling later in the east and south of England, and heavy rain at Biarritz, as well as in some parts of Italy and Austria. Snow falling in the north of Russia.

Temperature risen over Great Britain, France, and Germany, fallen in most other countries. Morning readings highest, 59° at Nemours, 57° at Oran, and 56° at Algiers (Italian reports wanting); above 45° in the west of France. Lowest, (1) 7° at Haparanda, 11° at Archangel, and 14° at Uleaborg; (2) 26° at Munich, and 33° at Limoges; (3) 27° at Parsonstown and 34° at Ardrossan. Daily maxima over our Islands below 45° at all but the extreme southern stations; thermometer reaching 50° or more in Spain, and the extreme south of France, and exceeding 60° in the south of Italy. Frost occurring over Scotland at night.

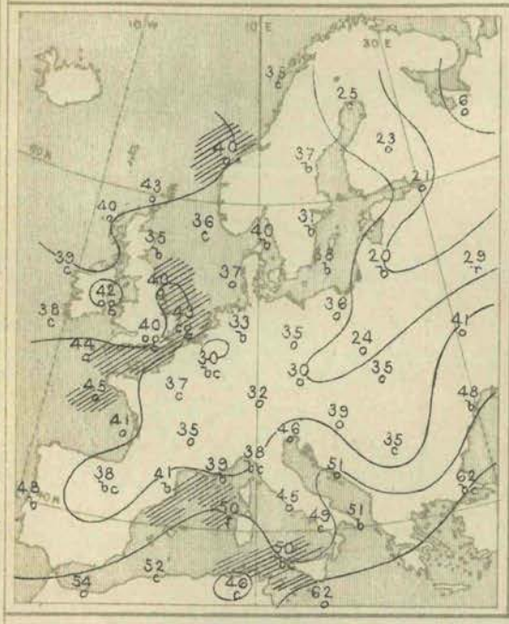
Wind strong to a gale from the North-Eastward over England, the Netherlands, and the northern parts of Germany and France, and strong from the North-Westward in the south of France, but light from the Northward over Scotland and the greater part of Ireland. South-Westerly in the west of Norway; light from the South-Eastward over the central and southern parts of Russia. Variable over Austria and south Germany. Wind moderating later over England, but continuing to blow very strongly on our south-east coasts. South-Westerly and Westerly gales reported in the west of Norway in evening.

Barometer highest, 30·4 ins. and upwards in an anticyclone spreading from the Atlantic over Scotland and Ireland. Lowest, 29·4 ins. and less in a depression over the Gulf of Genoa; 29·5 ins. and less in another disturbance over western Germany; 29·8 ins. and less in a third system approaching the north-west of Norway. Anticyclone subsequently advancing eastwards over our Islands, and barometer rising in all parts of western Europe. Norwegian depression spreading southwards.

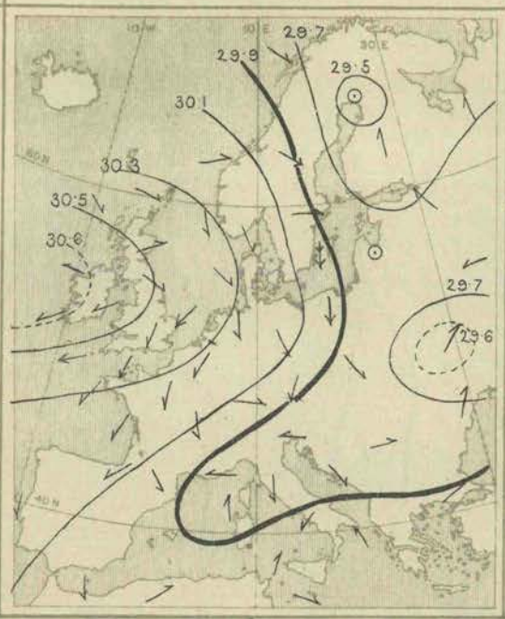
Judd & [illegible] 63, Carter Lane

Tuesday, 21st November.

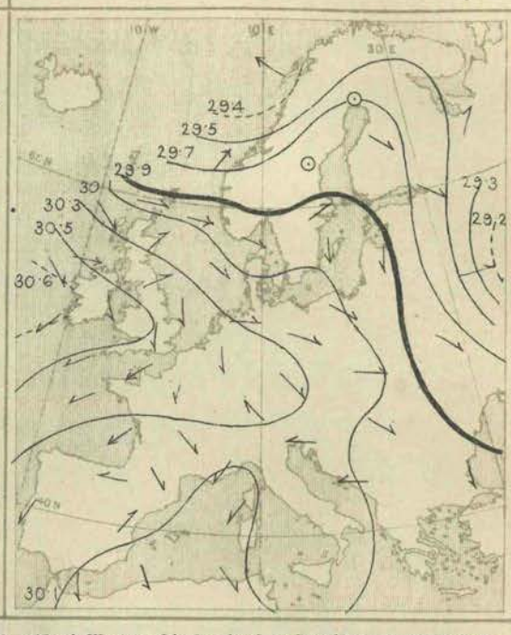
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fair in most parts of the United Kingdom, but with a good deal of cloud in places. Fine and bright in Sweden and north Germany, as well as in many parts of southern Europe, but dull in the central and eastern countries, with rain at Moscow, and snow at Cracow and Vienna. Rain falling during day in the extreme south-east of England, and showery weather setting in at night over the northern and north-western parts of the United Kingdom generally. Lunar halos seen at some of our northern stations.

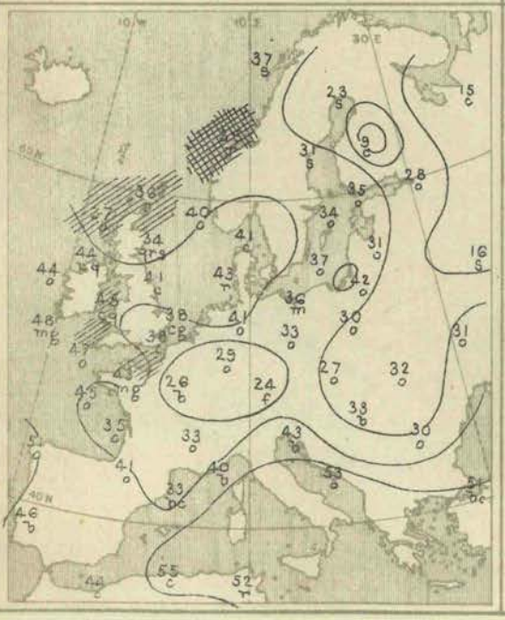
Temperature risen decidedly over Scandinavia, Finland, and Denmark, fallen in most other countries. Morning readings highest, 62° at Constantinople and Malta, 59° at Sfax, 54° at Oran, and 52° at Algiers; above 45° in many parts of southern and south-eastern Europe. Lowest, 6° at Archangel, 20° at Riga, 21° at St. Petersburg, and 23° at Kuopio; below 35° in many parts of Scotland and central Ireland. Daily maxima over our Islands ranging in most places between 43° and 48°, but thermometer remaining below 40° over Germany and central France. Exceeding 50° in Spain and the extreme south of France.

Wind light from the Westward or North-Westward in Scotland, and moderate to strong from the same quarters in Scandinavia; Northerly over Denmark, Germany, and the Baltic; North-Easterly over England, Ireland, France, Spain, and western Italy. Light from the Southward at most of the Russian stations; variable over the Adriatic, chiefly Southerly in Algeria. Subsequently backing to the Westward or North-Westward in all the more northern parts of our Islands, and increasing to a gale in Scotland at night.

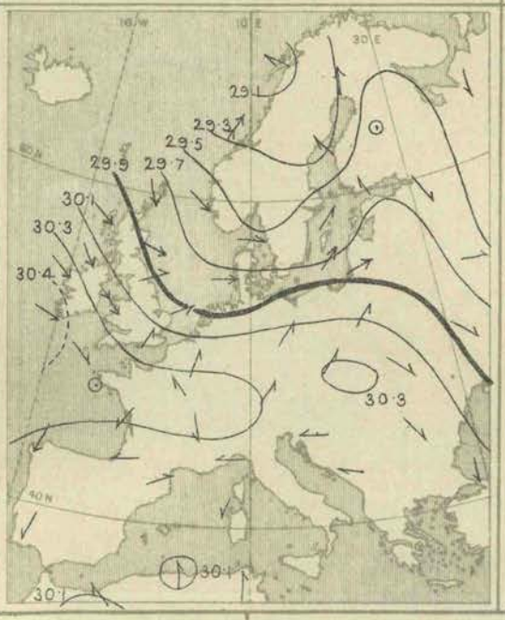
Barometer highest, 30·6 ins. and upwards in the west of Ireland; 30·3 ins. and upwards in an anticyclone covering the whole of our Islands, the Netherlands, and the North Sea. Lowest, 29·5 ins. and less in a depression over Lapland, 29·6 ins. and less in another disturbance over the south of Russia. New and deep depression advancing later towards the west of Norway, and barometer falling quickly on our extreme northern coasts; disturbance over Lapland travelling quickly south-eastwards to central Russia.

Wednesday, 22nd November.

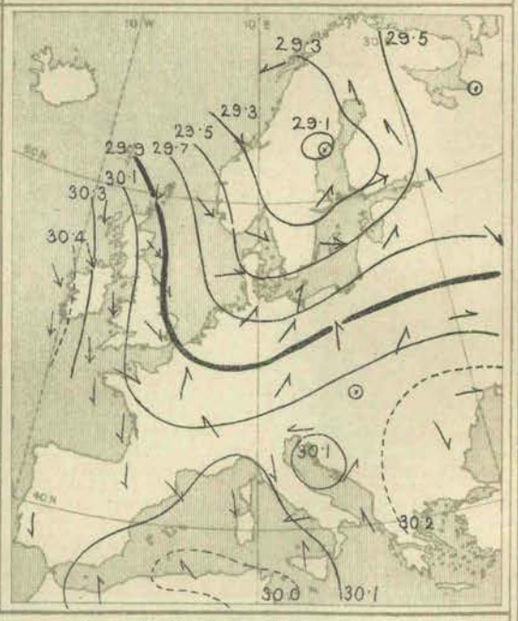
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather cloudy or overcast in most parts of our Islands and the Continent, with passing showers at some of our own northern stations, rain in Denmark, as well as in Tunis, and snow over the northern parts of Sweden and also at Moscow. Showers of hail, sleet, or snow falling later in many parts of the United Kingdom, and rain in the west of Norway, as well as at some of the French stations. Heavy rain falling in Italy. Lunar halos seen at Ardrossan and the North Foreland.

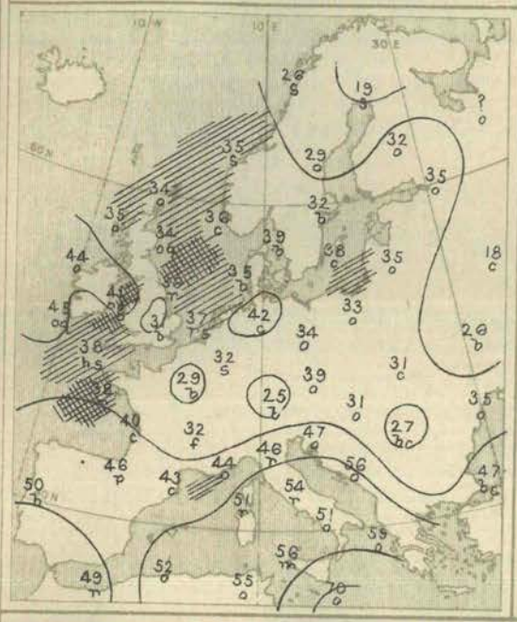
Temperature risen in most parts of Ireland and England, as well as in Denmark, north Germany, and the south of Scandinavia, but fallen elsewhere. Morning readings highest, 58° at Sfax, 55° at Sanguinaire and Algiers, and 53° at Lésina (Italian reports wanting); above 45° on our own south-west coasts. Lowest, 9° at Kuopio, 15° at Archangel and Uleaborg, and 16° at Moscow; below the freezing point in many parts of northern, eastern, and central Europe. Daily maxima below 40° in the north of Scotland, but above 45° in the west and south of our Islands. Thermometer exceeding 55° in many parts of southern Europe, and exceeding 60° in the south of Italy. Frost occurring over the United Kingdom at night.

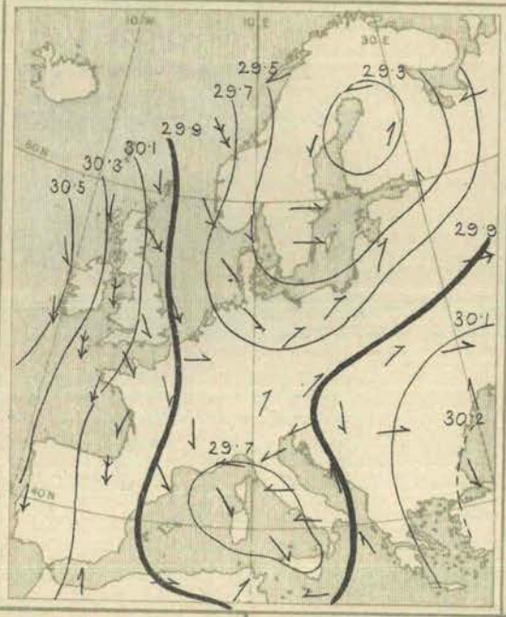
Wind strong to a gale from the Northward or North-Westward over the northern parts of our Islands, but moderate from the Westward on our south and east coasts, as well as in Denmark; South-Westerly over Germany and the southern parts of Scandinavia, South-Easterly in the north of Scandinavia. Light from the North-Westward at most of the Russian stations; Easterly over France, and also over the northern parts of the Adriatic; North-Easterly or Northerly in Spain. Subsequently veering to the Northward or North-Westward in all parts of the United Kingdom, and increasing to a strong gale over the Irish Sea. North-Westerly gales reported also over the Netherlands.

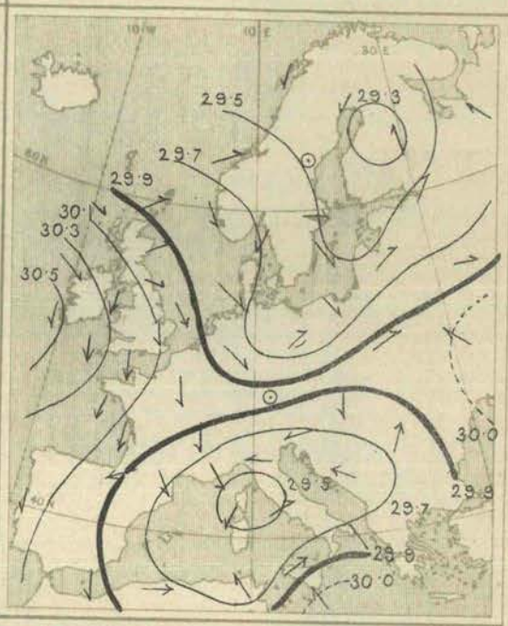
Barometer highest, 30·4 ins. and upwards in the south-west of Ireland, 30·2 ins. and upwards in an anticyclone covering France and the west and south of our Islands, and extending eastwards and south-eastwards to Germany, Austria, and south-eastern Europe. Lowest, 29·1 ins. and less in a depression off the west of Norway, 29·4 ins. and less in another system over central Russia. Norwegian depression subsequently moving south-eastwards, and barometer rising in all the more northern parts of our Islands.

Thursday, 23rd November.

Temperature and Weather.	Barometer and Wind.	
8 a.m.	8 a.m.	6 p.m.







Weather fine in many parts of western Europe, but showers of hail, sleet, or snow reported locally. Dull in most of the eastern, central, and southern countries, with rain over northern Italy and the extreme south of France, as well as at Nemours and Sfax. Cold showers falling later in most parts of the United Kingdom; thunder heard at Biarritz. Heavy rain reported in Italy and Algeria, the largest amount being 1·9 ins. at Rome.

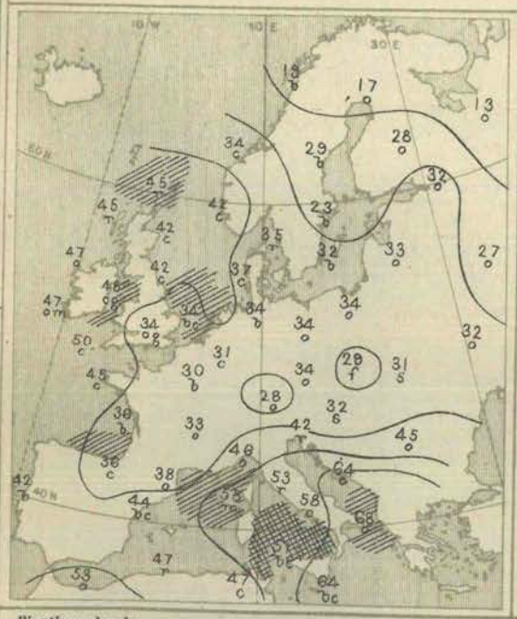
Temperature risen slightly in France, and quickly over Finland, but fallen in most other countries. Morning readings highest, 70° at Malta, 62° at Sfax, 59° at Brindisi, and 56° at Lésina and Palermo; above 50° at the Mediterranean stations generally. Lowest, 0° zero (?) at Archangel, 16° at Cracow, 18° at Moscow, and 19° at Haparanda; below the freezing point in many parts of northern, central, and eastern Europe, as well as over the greater part of England. Daily maxima below 40° at many of our southern and south-eastern stations; brisk rise taking place at night in the west and north of our Islands, but sharp frost occurring over England.

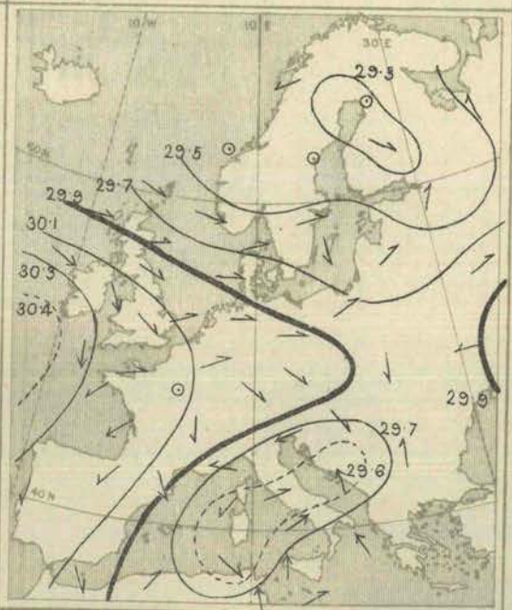
Wind strong from the Northward over western Europe generally, with gale in the Irish Sea and at the mouth of the English Channel. Moderate to strong from the South-Westward or Southward over Germany, Russia, and the Baltic; light and variable in Austria. Light or moderate from the Eastward in Italy, but varying between West and South in Algeria. Gale in Irish Sea subsiding later, and wind backing to the North-Westward or Westward over the northern parts of our Islands generally.

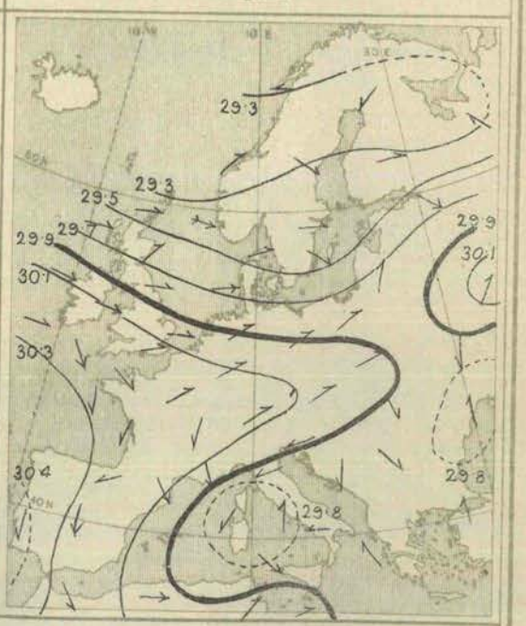
Barometer highest, 30·5 ins. and upwards in an anticyclone lying to the westward of Ireland; 30·2 ins. and upwards in another high-pressure system over the Black Sea. Lowest, 29·3 ins. and less in a depression over Finland; 29·7 ins. and less in another disturbance to the westward of Italy. Northern depression subsequently moving eastwards, but new disturbance beginning to approach our Islands from the North-Westward in evening.

Friday, 24th November.

Temperature and Weather.	Barometer and Wind.	
8 a.m.	8 a.m.	6 p.m.







Weather cloudy or overcast in most parts of our Islands and the Continent, but fine in Sweden, as well as at some of the French stations. Rain falling in the Shetlands and Hebrides, as well as at some of the Austrian and Italian stations, and passing showers in some parts of England and Ireland; snow reported at Munich and Lemberg. Rain falling during day in many parts of Europe, heavily at Stornoway, and also at some of the Italian stations. Snow falling in some parts of Russia.

Temperature risen over our Islands, as well as in Italy, Austria, and the southern parts of Russia, but fallen elsewhere. Morning readings highest, 68° at Brindisi, 64° at Lésina and Malta, and 58° at Naples. Above 50° over the central parts of the Mediterranean generally, and above 45° at most of our own western stations. Lowest, 13° at Archangel, 17° at Haparanda, and 19° at Bodö and Uleaborg; below the freezing point in many parts of northern, eastern, and central Europe, and very little above it in the south-east of England. Daily maxima a little above 50° at several of our western stations, but below it in most parts of France, and below 40° in Germany. Exceeding 60° over the southern parts of Italy, and reaching 72° at Palermo.

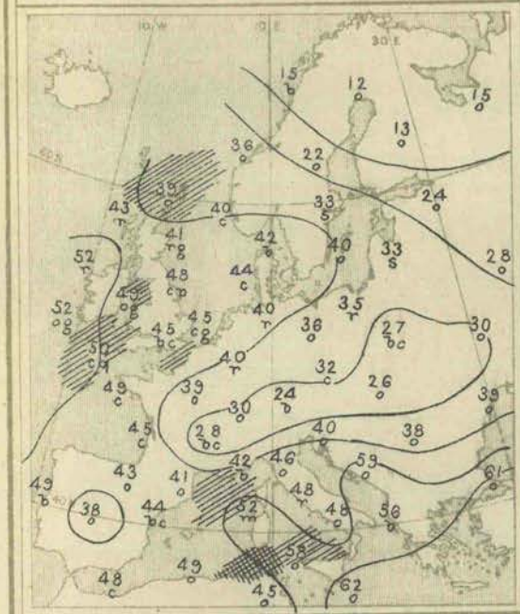
Wind moderate from the Westward at most of our northern and eastern stations, as well as in Denmark, Germany, and the south of Scandinavia. Strong from the North-Westward on our western coasts, and light from the same quarter in the south of England; Northerly over France and Spain. Strong from the Southward over the southern parts of Italy and the Adriatic. Moderating somewhat later on our western coasts, but increasing to a gale in the south of Norway. No important change occurring elsewhere.

Barometer highest, 30·4 ins. and upwards in an anticyclone lying to the south-westward off our Islands. Lowest, 29·3 ins. and less in a depression over Finland and the north of Sweden; 29·6 ins. and less in a complex disturbance stretching across the Adriatic, northern Italy, Sardinia, and the neighbouring parts of the Mediterranean. Fall taking place over our Islands during day, the change being greatest in the north. Depression over southern Europe partially filling up.

Saturday, 25th November.

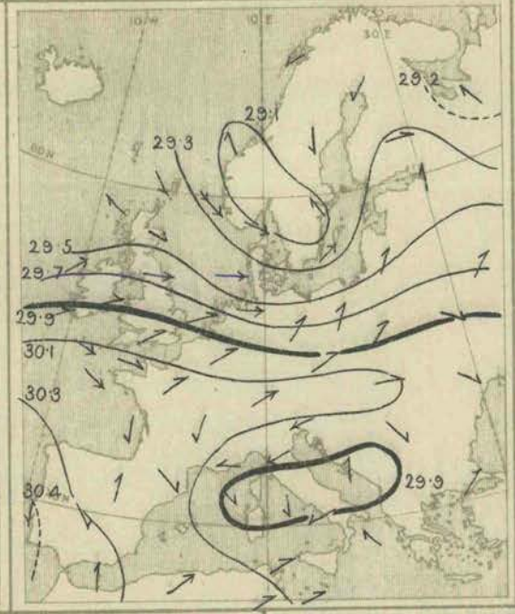
Temperature and Weather.

8 a.m.

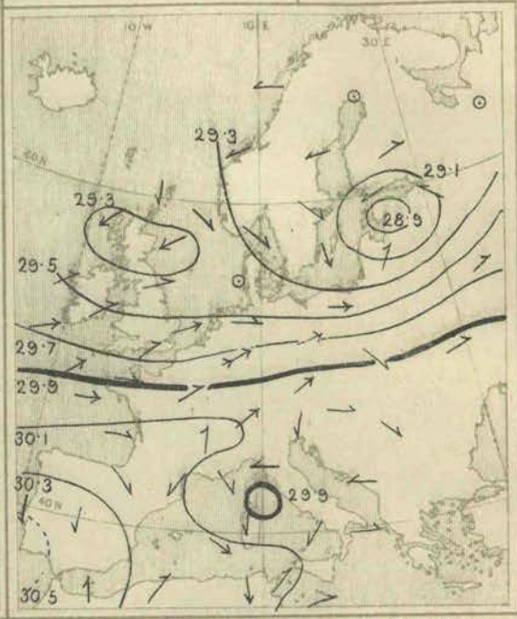


Barometer and Wind.

8 a.m.



6 p.m.



Weather cloudy or overcast in most parts of our Islands and the Continent, with rain in Scotland and the north of Ireland, as well as at some of the Italian stations, and with snow at Stockholm. Fine in the south-east of England and also in Spain and the southern parts of France and Germany. Rain falling later in nearly all parts of western Europe—heavily in places; and snow over Finland and the Baltic Provinces.

Temperature risen over England, Ireland, France, Germany, and the Baltic, but fallen elsewhere. Morning readings highest, (1) 62° at Malta, 59° at Lesina, 58° at Palermo, and 56° at Brindisi; (2) 52° at Belmullet and Valencia (Ireland); above 45° at most of the English and Irish stations. Lowest, 12° at Haparanda, 13° at Uleaborg and Kuopio, and 15° at Archangel; below the freezing point in many parts of northern, eastern, and central Europe. Rising during day to between 50° and 55° in most parts of Ireland, England, France, and Spain; exceeding 60° in the south of Italy, and reaching 66° at Brindisi, Palermo, and Malta.

Wind moderate to strong from the Westward or South-Westward over Ireland, England, the Netherlands, Denmark, and Germany. Light from the North-Westward in the east of Scotland, and strong to a gale from the same quarter in the south of Norway; light from East or South-East in the west of Norway. Light to moderate from the Northward or North-Westward over the greater part of southern Europe, but Southerly or South-Westerly over Algeria and the south of Italy. Subsequently shifting to the Eastward or North-Eastward in Scotland; increasing to a gale from West or South-West at some of the German stations.

Barometer highest, 30·4 ins. and upwards in an anticyclone lying off the Portuguese coasts. Lowest, 29·1 ins. and less in a depression over the southern parts of Scandinavia; 29·4 ins. and less in another disturbance off the west of Scotland; 29·9 ins. and less in a complex system over the central parts of Italy and the Adriatic. The two former depressions moving eastwards later, the one to the Baltic Provinces, and the other to central Scotland. Italian low-pressure area partially filling up.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force is indicated thus: ⇛⟶ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze: and ⊙ = a calm. In the left-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Germany, Sweden, and Norway, and 7 a.m. in France, Algeria, Italy, Austria, and Russia; that for 6 p.m. is prepared from observations made at 6 p.m. in the British Islands and France, 7 p.m. in Algeria, 8 p.m. in Sweden and Norway, Germany, and Austria, and 9 p.m. in Russia, Belgium, and Italy. The time indicated in each case is the standard time for each country

GENERAL NOTES.

The deep depression which lay over the North Sea at the close of the preceding week subsequently travelled south-eastwards across central Europe, and the Northerly gales over our Islands and France gradually subsided. An anticyclone now spread temporarily over the more western countries from the Atlantic, and fair dry weather consequently became general in all but the extreme northern parts of Europe, where the conditions began to be influenced by a fresh series of depressions, which advanced over Scandinavia from the north-westward. After the middle of the week, the northern disturbances began to take a rather more southerly course, and the wind over our Islands, therefore, backed to the North-Westward and Westward, while unsettled showery weather became general. Depressions were at the same time developed over southern Europe and the Mediterranean, and heavy rain fell at many of the Italian and Algerian stations. At the close of the period a well-marked disturbance moved eastwards directly across Scotland, and a further backing of the wind towards South-West was reported over the greater part of the Continent.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 278.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	10·0	?	19	?	EASTBOURNE	7·7	?	13	?
OSWALDKIRK (Yorkshire)	7·7	?	14	?	TENBY	20·3	?	35	?
WORKSOP	6·8	− 2·9	12	− 6	NEWQUAY	?20·3	?	?34	?
THURCASTON (Leicestershire)	10·1	+ 0·6	18	+ 1	TORQUAY	23·9	?	39	?
MARGATE	5·0	?	8	?	ARLEY COTTAGE (County Cavan)	16·3	?	29	?
WESTBOURNE (Sussex)	15·7	?	27	?	GUERNSEY	7·0	?	11	?
BRIGHTON	9·1	?	15	?					

* The values at Westbourne, Tenby, Torquay and Guernsey are obtained by Jordan's Photographi Recorder.

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WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; R. H. SCOTT, F.R.S., SECRETARY.

By whom Subscriptions, payable in advance, can be received.

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VOL. X. No. 48.] *Third Series.* WEEK ENDING SATURDAY, 2ND DECEMBER, 1893. [*Price 6d.* *Annual Subscription post paid, £1 10s. 0d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871-90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the twenty-five years 1866-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the ten years 1881-90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

	DISTRICTS. (See p. 284.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 1st, 1893. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	59	12	45·1	31·6	38·4	1 below.	9	− 3	39	+16	2337*	+482	662*	+ 11
	1. SCOTLAND, EAST	59	15	45·6	31·8	38·7	0 (average)	10	− 3	38	+10	2627	+286	738	+ 38
	2. ENGLAND, N.E.	58	20	46·3	35·7	41·0	1 above.	12	− 3	25	+ 4	2926	+416	554	− 28
	3. ENGLAND, EAST	58	20	46·4	35·9	41·2	1 above.	12	− 4	25	+ 5	3405	+500	660	− 6
	4. MIDLAND COUNTIES	58	17	46·5	34·4	40·5	1 above.	13	− 5	30	+ 7	3477	+635	664	− 7
	5. ENGLAND, SOUTH	53	17	46·4	36·0	41·2	1 below	12	−14	24	+ 7	3720	+546	472	− 14
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	54	13	47·6	35·1	41·4	1 above.	16	− 1	28	+13	2882	+454	499	+ 8
	7. ENGLAND, N.W.	56	19	47·0	37·4	42·2	1 above.	21	+ 3	13	− 1	3364	+725	404	− 67
	8. ENGLAND, S.W.	53	18	47·0	37·2	42·1	1 below.	21	− 8	13	+ 4	3641	+656	321	− 83
	9. IRELAND, NORTH	56	20	47·0	37·6	42·3	1 above.	21	+ 1	12	− 5	3121	+528	374	− 56
	10. IRELAND, SOUTH	57	20	46·9	37·4	42·2	1 below.	13	−16	21	+ 9	3505	+547	278	− 51
	—CHANNEL ISLANDS	54	34	49·5	42·8	46·2	1 below.	29	−15	0	− 2	4230	+804	79	− 47

Rainfall.

	DISTRICTS. (See p. 284.)	For the Week. Number of Rainy Days.	Total Fall.	More or less than the mean for the Week.	From Jan. 1st, 1893. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.
			10ths of in.	10ths of ins.			Ins.	Ins.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	7	39	26 more.	227	+ 3	50·7	+ 5·7
	1. SCOTLAND, EAST	4	2	5 less.	179	− 5	24·8	− 4·8
	2. ENGLAND, N.E.	3	4	3 less.	157	−15	19·4	− 5·3
	3. ENGLAND, EAST	4	6	0 (average)	155	−13	19·4	− 4·9
	4. MIDLAND COUNTIES	3	2	4 less.	146	−20	18·0	− 8·7
	5. ENGLAND, SOUTH	4	3	4 less.	146	−15	21·0	− 4·7
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	6	9	4 less.	181	−12	36·3	−10·0
	7. ENGLAND, N.W.	5	7	1 less.	170	− 9	27·8	− 4·3
	8. ENGLAND, S.W.	3	4	7 less.	154	−33	29·3	− 8·2
	9. IRELAND, NORTH	5	3	5 less.	193	−17	30·2	− 3·1
	10. IRELAND, SOUTH	3	7	2 less.	168	−24	27·7	− 3·2
	—CHANNEL ISLANDS	3	3	7 less.	166	−33	25·1	− 5·9

Bright Sunshine.

	DISTRICTS. (See p. 284.)	For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 1st, 1893. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	6	− 3	12	− 7	990	−143	23	− 4
	1. SCOTLAND, EAST	11	+ 3	22	+ 4	1350	+ 38	32	+ 1
	2. ENGLAND, N.E.	12	+ 5	23	+ 10	1528	+319	36	+ 7
	3. ENGLAND, EAST	10	− 3	18	− 2	1782	+308	43	+ 8
	4. MIDLAND COUNTIES	12	+ 3	22	+ 5	1680	+563	40	+ 9
	5. ENGLAND, SOUTH	12	0	21	− 1	1827	+401	44	+ 10
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	15	+ 7	29	+ 14	1520	+226	36	+ 5
	7. ENGLAND, N.W.	12	+ 7	22	+ 12	1480	+198	35	+ 5
	8. ENGLAND, S.W.	15	+ 3	26	+ 6	1914	+371	46	+ 9
	9. IRELAND, NORTH	16	+ 6	29	+ 11	1341	+143	32	+ 3
	10. IRELAND, SOUTH	15	+ 3	27	+ 4	1486	+ 92	35	+ 2
	—CHANNEL ISLANDS	13	+ 3	23	+ 4	2225	+414	53	+ 10

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather was very changeable, with considerable fluctuations in temperature. Snow fell in Scotland on the 29th and 30th November, and afterwards extended southwards over the greater part of the United Kingdom.

Temperature. The mean for the entire week differed very little from the normal. The highest readings were observed mainly on the 28th November, when the thermometer exceeded 55° in all districts excepting Scotland W., England S. and S.W. and the Channel Islands. In Scotland N. and E. the absolute maximum was as high as 59°. The lowest readings occurred in Scotland mostly on the 1st December, but over England and Ireland on the 2nd, the thermometer on one or other of these dates falling to 20° or less in all districts excepting the Channel Islands. In Scotland the absolute minima ranged between 12° and 15°.

Rainfall amounted to less than the mean in all districts excepting Scotland N. and England E., the deficit being in many places very considerable. In Scotland N., however, the total amount was as much as three times the normal, the excess being due chiefly to some exceedingly heavy falls which occurred in the western parts of the district. At Glencarron, the total for the week was no less than 10·9 ins.

Bright Sunshine was in excess of the mean in all districts excepting Scotland N., England E., and England S. The percentage of the possible duration ranged from 12 in Scotland N. and 18 in England E. to 29 in Scotland W. and Ireland N.

Barometer and Wind.—In the course of the week several large depresions advanced over northern Europe from the Atlantic, while secondary systems passed eastwards or south-eastwards across the United Kingdom. The prevailing winds were, therefore, Westerly (South-West to North-West), with gales on our extreme north and north-west coasts on the 29th November, and again in the north of Scotland on the 2nd December. At the close of the week an anticyclone spread over Ireland and England from the westward and the winds on our south coasts shifted to the North-Eastward.

607 1|90 J. & Co., Ltd. 213 70 12|93 1896

* This value has been altered slightly owing to the receipt of further information for a preceding week.

II.—DATA from which the SUMMARY on page 283 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°				Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	51	21	44·0	31·9	38·0	− 2·0	6	37	7	1·41	+0·44	*	*	*	*
	Stornoway	53	20	45·1	33·3	39·7	− 0·2	11	33	7	4·13	+2·94	3·7	−2·3	8	− 7
	Wick	55	23	44·6	31·7	38·2	− 0·8	7	38	7	1·77	+1·10	*	*	*	*
	Lairg ℌ	59	12	43·7	27·9	35·8	− 1·4	5	51	7	1·42	+0·54	*	*	*	*
	Glencarron ℌ	51	19	44·3	30·6	37·5	− 0·7	6	42	7	10·90	+8·71	*	*	*	*
	Fort Augustus ℌ	55	21	46·6	31·1	38·9	− 0·1	13	42	6	1·86	+0·82	4·6	?	9	?
	Fort William ℌ	54	23	46·6	34·8	40·7	+ 0·8	13	28	6	5·63	+3·73	8·8	?	18	?
1. SCOTLAND, E.	Nairn	59	15	46·9	31·3	39·1	+ 0·4	14	41	5	0·40	−0·12	*	*	*	*
	Aberdeen	56	22	45·0	32·6	38·8	− 0·3	8	35	5	0·30	−0·40	12·2	+ 2·7	25	+ 4
	Braemar ℌ	53	19	44·6	27·0	35·8	+ 0·1	7	54	5	0·23	−0·61	6·8†	?†	14†	?†
	Ochtertyre ℌ	57	20	46·3	31·0	38·7	+ 0·7	12	42	1	0·02	−0·97	*	*	*	*
	Leith	56	26	46·9	36·3	41·6	+ 1·0	14	23	3	0·04	−0·42	*	*	*	*
	Marchmont ℌ	56	20	44·1	32·6	38·4	+ 0·4	6	35	2	0·17	−0·60	14·3	?	28	?
2. ENGLAND, N.E.	Alnwick Castle	52	25	44·6	34·7	39·7	+ 0·2	7	28	4	0·48	−0·27	*	*	*	*
	Durham	57	22	47·3	33·9	40·6	+ 2·1	15	32	2	0·12	−0·60	17·3	+ 6·3	33	+12
	Shields	58	22	47·1	34·9	41·0	+ 0·6	14	28	4	0·26	−0·40	*	*	*	*
	Scarborough ℳ	55	25	46·4	36·9	41·7	+ 0·9	12	21	4	0·66	−0·02	*	*	*	*
	York	54	20	46·9	35·6	41·3	+ 1·6	14	26	2	0·23	−0·27	10·6	+ 4·0	20	+ 7
	Spurn Head	52	28	45·3	37·9	41·6	+ 0·6	9	17	4	0·66	+0·14	*	*	*	*
3. ENGLAND, E.	Hillington ℳ	54	22	46·6	35·3	41·0	+ 2·0	13	27	4	0·87	+0·25	8·1	− 1·4	15	− 3
	Yarmouth	54	28	46·3	37·7	42·0	+ 1·3	12	18	5	0·66	+0·04	*	*	*	*
	Geldeston	55	22	46·9	36·3	41·6	+ 1·1	14	23	5	0·74	+0·12	9·7	− 2·3	17	− 5
	Cambridge	58	20	47·1	34·6	40·9	+ 1·3	14	30	3	0·49	+0·03	11·7	+ 0·2	21	+ 1
	Rothamsted	54	22	45·3	35·4	40·4	+ 0·8	9	26	5	0·32	−0·28	11·2	?	20	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	57	21	48·0	33·0	40·5	+ 0·9	17	36	2	0·22	−0·28	*	*	*	*
	Loughborough	58	17	46·7	35·7	41·2	+ 1·4	13	25	2	0·21	−0·29	*	*	*	*
	Stamford (Ketton Hall)	56	22	45·9	35·6	40·8	+ 1·1	11	25	4	0·26	−0·34	*	*	*	*
	Cheadle ℳ	54	20	46·3	32·5	39·4	+ 0·5	12	36	2	0·16	−0·53	*	*	*	*
	Churchstoke ℳ	54	17	47·0	31·7	39·4	− 0·3	14	40	2	0·14	−0·65	13·4	+ 4·6	24	+ 8
	Hereford ℳ	54	20	46·9	36·1	41·5	+ 0·8	14	24	3	0·20	−0·39	*	*	*	*
	Cirencester	53	22	45·4	34·7	40·1	+ 0·9	10	28	2	0·11	−0·58	12·0	+ 2·2	21	+ 3
	Oxford	54	22	46·1	35·9	41·0	+ 0·8	11	24	3	0·16	−0·37	13·8	+ 4·8	25	+ 8
5. ENGLAND, S.	London	53	26	46·0	36·1	41·1	− 0·1	11	24	3	0·27	−0·24	6·6†	+ 0·5†	12†	+ 3†
	North Foreland	53	30	46·6	37·0	41·8	− 0·2	13	21	3	0·40	?	*	*	*	*
	Strathfield Turgiss ℳ	51	20	45·0	34·8	39·9	− 0·1	8	27	4	0·24	−0·33	*	*	*	*
	Dungeness	50	28	46·4	35·7	41·1	− 1·4	12	25	4	0·18	−0·53	*	*	*	*
	Hastings (St. Leonards)	51	28	48·5	35·0	42·3	− 0·1	27	17	4	0·31	−0·40	9·5	− 2·7	17	− 5
	Southampton	53	17	47·8	35·8	41·8	− 0·3	16	26	4	0·41	−0·31	11·4	+ 1·6	20	+ 2
	Hurst Castle	49	26	45·7	37·0	41·4	− 1·8	10	20	6	0·37	−0·30	*	*	*	*
	Stowell ℳ	52	22	45·4	35·6	40·5	− 0·3	10	25	2	0·15	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	?	22	?	34·3	?	?	?		7	2·43	+0·23	*	*	*	*
	Glasgow	54	25	47·2	35·9	41·6	+ 2·1	15	25	4	0·57	−0·31	12·4	+ 8·2	24	+17
	Ardrossan	54	24	47·3	37·3	42·3	+ 0·8	22	13	5	0·32	−0·56	*	*	*	*
	Glenlee ℌ	54	13	47·6	30·3	39·0	+ 0·2	16	45	6	0·81	−0·68	*	*	*	*
	Douglas (Isle of Man)	54	23	48·2	36·9	42·6	+ 0·1	26	14	6	0·46	−0·64	17·7	+ 6·1	33	+12
7. ENGLAND, N.W.	Stonyhurst	50	21	45·4	33·6	39·5	− 0·4	10	32	6	1·29	+0·21	16·6	+ 8·3	31	+16
	Blackpool ℳ	51	19	47·0	36·9	42·0	+ 1·4	14	14	5	0·72	−0·05	15·6	+ 7·4	29	+14
	Manchester	54	20	45·5	32·6	39·1	− 0·6	10	36	6	0·40	−0·38	2·6	?	5	?
	Liverpool Obsy. (Bidston)	56	27	47·0	39·3	43·6	+ 2·1	23	8	3	0·19	−0·45	*	*	*	*
	Llandudno ℳ	55	32	48·7	39·3	44·0	+ 0·7	25	8	5	1·01	+0·20	12·1	+ 4·3	22	+ 8
	Holyhead	53	34	47·4	42·4	44·9	+ 0·3	20	0	6	0·53	−0·34	*	*	*	*
8. ENGLAND, S.W.	Llandovery	51	18	46·1	34·7	40·4	− 1·2	11	28	4	0·52	−0·64	*	*	*	*
	Pembroke	52	32	48·0	41·9	45·0	− 0·2	21	0	3	0·20	−0·75	9·7	− 1·5	17	− 3
	Bristol (Montpelier)	52	22	47·9	37·1	42·5	+ 1·0	24	14	3	0·15	?	*	*	*	*
	Arlington (N. Devon)	49	25	44·7	35·7	40·2	− 1·6	8	24	4	0·59	−0·32	*	*	*	*
	Cullompton ℳ	53	21	46·8	35·7	41·3	− 0·5	13	26	3	0·17	−0·70	15·7	+ 7·7	28	+13
	Falmouth	51	30	47·6	38·8	43·2	− 2·8	22	9	3	0·26	−0·98	18·3	+ 5·1	32	+ 9
	Plymouth	52	28	48·3	37·8	43·1	− 1·3	12	25	2	0·47	−0·31	13·6	+ 2·7	23	+ 3
	Prawle Point	50	26	46·3	36·1	41·2	− 4·7	12	24	2	0·43	−0·41	*	*	*	*
9. IRELAND, N.	Malin Head	52	32	47·6	40·9	44·3	+ 1·6	21	3	5	0·35	?	*	*	*	*
	Londonderry	54	29	47·6	38·8	43·2	+ 1·0	22	9	6	0·47	−0·51	*	*	*	*
	Edenfel (Omagh)	54	22	46·1	36·0	41·1	+ 1·3	11	24	6	0·33	−0·51	*	*	*	*
	Belmullet	53	33	48·7	40·9	44·8	− 1·3	24	3	7	0·32	?	*	*	*	*
	Markree Castle	56	23	47·8	36·1	42·0	0·0	16	17	4	0·45	−0·33	13·1	+ 3·7	24	+ 5
	Brookeborough	56	20	47·1	35·5	41·3	+ 1·8	14	26	5	0·25	−0·77	*	*	*	*
	Armagh	54	27	47·2	36·7	42·0	+ 2·3	15	15	2	0·23	−0·47	18·7	+ 7·6	35	+14
	Donaghadee	56	32	47·0	40·6	43·8	+ 1·6	18	4	6	0·25	−0·46	*	*	*	*
	Edgeworthstown	52	24	43·6	33·1	38·4	− 2·0	4	33	3	0·39	−0·46	*	*	*	*
10. IRELAND, S.	Dublin	57	28	48·2	38·7	43·5	+ 0·6	24	9	2	0·29	−0·35	16·2	+ 2·7	29	+ 4
	Parsonstown	53	22	45·4	35·9	40·7	− 0·4	10	24	3	0·40	−0·30	11·9	+ 0·5	22	+ 0
	Kilkenny	55	20	44·6	35·7	40·2	− 2·4	7	24	3	0·39	−0·27	*	*	*	*
	Waterford	55	25	46·0	36·9	41·5	− 2·6	11	21	3	0·53	−0·44	*	*	*	*
	Roche's Point	53	29	45·0	40·1	43·6	− 1·3	19	5	1	0·60	−0·55	*	*	*	*
	Valencia	53	30	48·0	41·1	44·6	− 1·6	22	3	4	0·95	−0·29	16·1	+ 5·3	29	+ 9
	Killarney	54	21	48·7	34·1	41·4	− 2·5	19	32	4	1·30	?	*	*	*	*
	Foynes	55	27	47·4	36·9	42·2	− 0·6	23	14	4	0·77	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	53	34	49·1	42·6	45·9	− 1·9	27	0	3	0·24	−0·70	*	*	*	*
	Jersey	54	37	49·9	43·0	46·5	+ 0·6	32	0	3	0·35	−0·60	15·0	+ 3·2	25	+ 4

Stations marked ℳ are in connection with the Royal Meteorological Society, and those marked ℌ with the Scottish Meteorological Society.

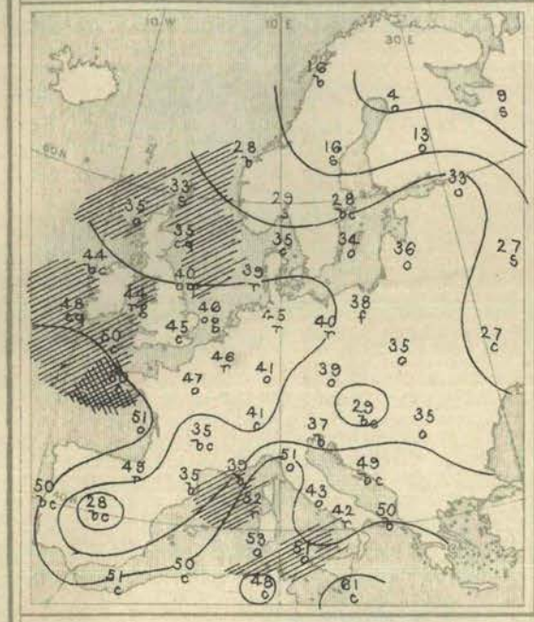
* An asterisk is inserted in all places for which the information is not usually received.

† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row at the Kew Observatory, and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

Sunday, 26th November.

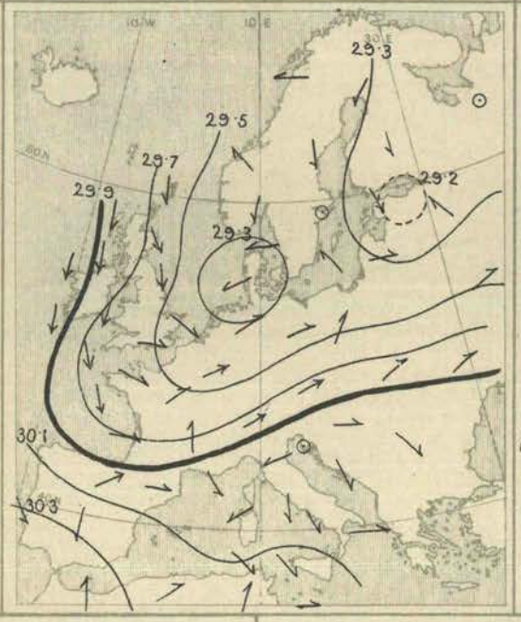
Temperature and Weather.

8 a.m.

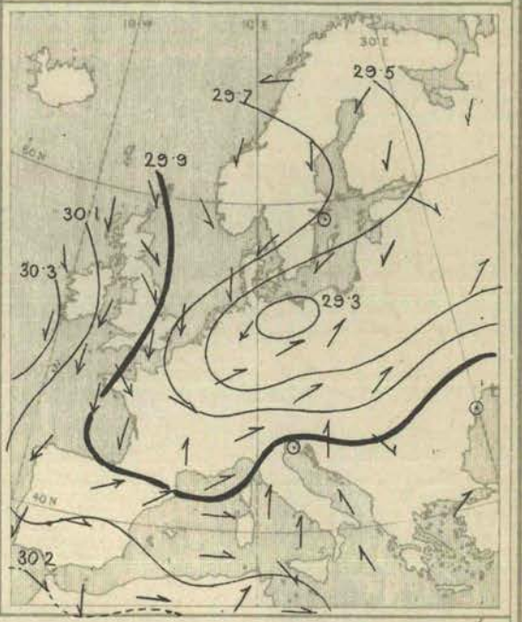


Barometer and Wind.

8 a.m.



6 p.m.



Weather rainy over the central parts of England, as well as over Denmark, the Netherlands, and north Germany; cloudy and unsettled in most other parts of Europe, with snow in the north of Scotland, as well as at several of the Scandinavian and Russian stations; fine and bright over south-eastern Europe as a whole, but rainy at Bilbao, Biarritz, and Naples. Rain falling later in many parts of the British Islands, the Netherlands, Germany, the south-west of France, and at Constantinople; snow at several northern and eastern stations.

Temperature rising over France and central Europe, falling over the British Isles. Morning readings highest, 61° at Malta, exceeding 50° at several of the Mediterranean and Atlantic stations, 47° at Paris, 46° at Brussels, 45° in London. Lowest, (1) 4° at Uleaborg, 9° at Archangel, 13° at Knopio, 16° at Bodö, 18° at Hangö, 27° at Moscow; (2) 29° at Buda-Pesth and Vienna; (3) 28° at Madrid. Rising slightly above 50° at our Channel stations later, to 59° at the Algerian stations, and 60° to 66° in south of Italy; falling decidedly over our Islands at night.

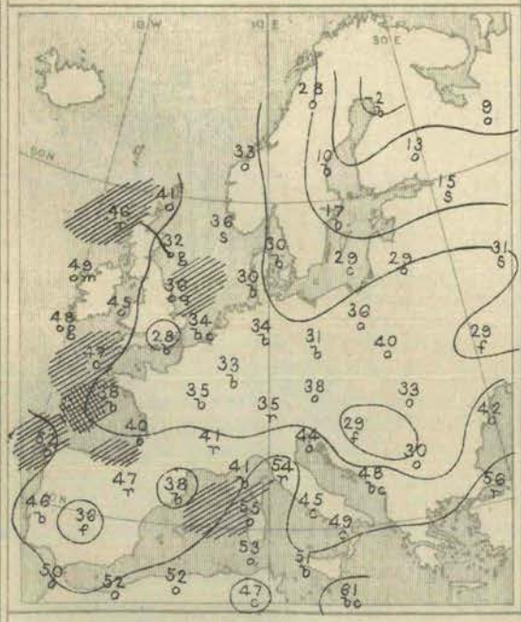
Wind South-Westerly to Westerly over eastern, central, and western Europe, but Northerly over the greater part of our Islands, and blowing very strongly in many places. The Northerly wind extending to France, Denmark, and the Netherlands later, but becoming moderate at the Scotch and Irish stations. South-Westerly wind still holding over Germany.

Barometer highest, 30·3 ins. and more to 30·0 ins. over the Spanish Peninsula; exceeding 30·0 ins. over the Mediterranean and south-eastern Europe, and apparently off the west of Ireland also. Lowest, 29·2 ins. and less in a depression over the Gulf of Finland, 29·3 ins. and less in another over the eastern and south-eastern shores of the North Sea. Gradients somewhat steep over central Europe and the British Islands. Rising very quickly over the United Kingdom and North Sea during the day, but gradients becoming less steep.

Monday, 27th November.

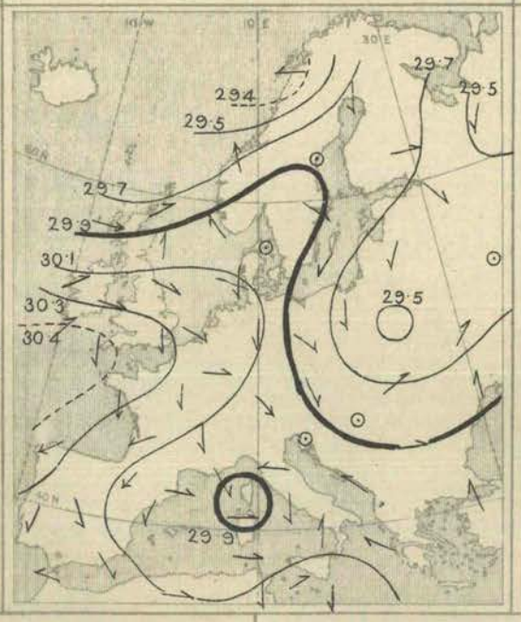
Temperature and Weather.

8 a.m.

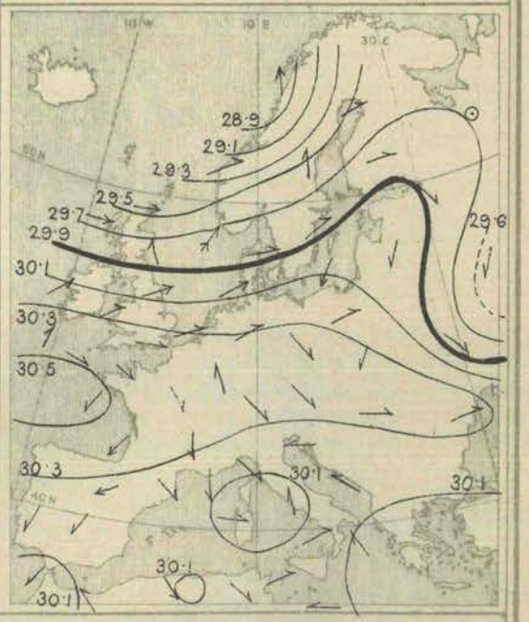


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning fine and bright over Germany, France, and the south and east of England, also over Denmark and Sweden; cloudy or overcast elsewhere, showery in Ireland and Scotland. Snow at Skudesnaes and in several parts of Russia; fog very prevalent over Austria-Hungary and at Kiev. Some rain later at our northern stations and on the eastern shores of the North Sea, and snow in Russia; lightning occurring at Christiansund, thunder at Ardrossan.

Temperature fallen fast over England. Morning readings exceeding 50° at some Mediterranean stations, at Corunna, and at Constantinople, and exceeding 40° on the western coasts of France and the British Isles, much lower elsewhere. Lowest, (1) −2° Fahr. at Haparanda, + 9° at Archangel, 10° at Hernösand, 15° at St. Petersburg, 17° at Stockholm; (2) 29° at Vienna, 30° at Hermanstadt; (3) 28° at Cambridge and in London, 31° at Oxford and Hurst Castle, 32° at Dungeness. Rising quickly over the British Islands later, and frost disappearing entirely from England; touching 64° at Brindisi, 68° at Palermo.

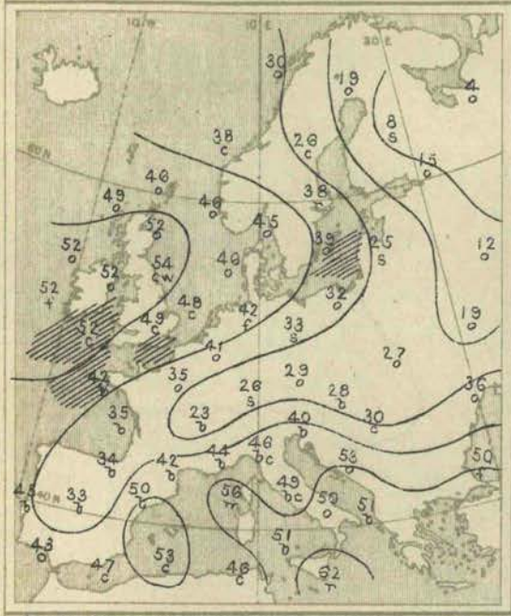
Wind (1) back to South-West and West over Ireland and the northern parts of Great Britain, South-Easterly and Easterly in Norway; (2) calm over Sweden and Denmark. Northerly over north Germany and the Netherlands, North-Easterly over France and Spain; North-Westerly to Westerly over Austria, South-Westerly in the south of Russia. Force, light to fresh in most countries. Blowing strongly from Westward on our north-western coasts later, as well as in the south-west of Norway; becoming South-Westerly over the Baltic and Gulf of Bothnia; more Northerly over Germany.

Barometer highest, 30·4 ins. and more to 30·2 ins. in an anticyclone spreading in from the Atlantic over Ireland, England, France, and Spain. Lowest, 29·4 ins. and less in a depression off the north-west of Norway; 29·5 ins. and less in another over the north-east of Russia and in a secondary over Poland; below 29·7 ins. off the north of Scotland, and below 29·9 ins. over Corsica. Falling decidedly over Scotland and Scandinavia later. Rising over France; anticyclone moving southwards and spreading south-eastwards, depressions moving eastwards to northward of Scotland.

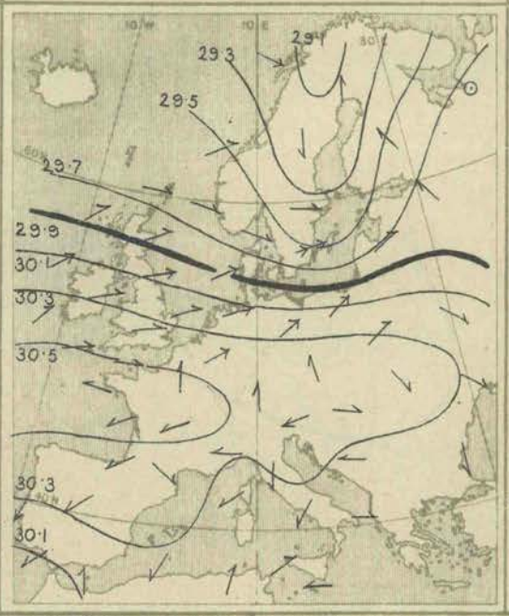
Judd & Co Ltd, Lith. 63, Carter Lane.

Tuesday, 28th November.

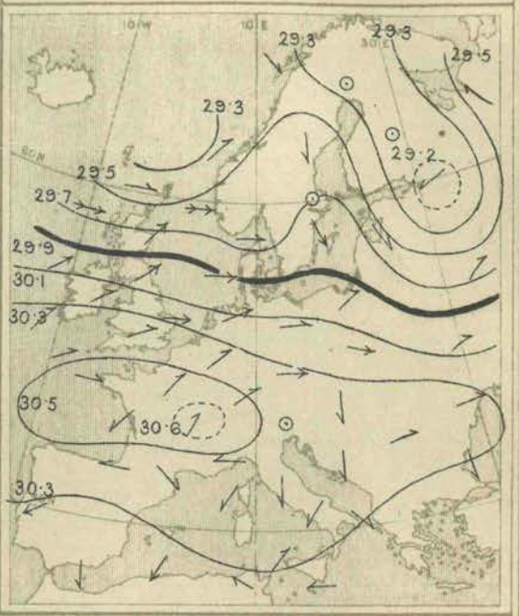
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather this morning fine and bright over southern Europe, very changeable and unsettled in the north-west and north; clouds heavy in the west of our Islands and in Norway, rain and snow falling over the Baltic and Finland. Considerable rain later in Norway, the Shetlands, Hebrides, also in Germany, and at a very few of the English and Irish stations, snow in Russia. A little rain at La Calle.

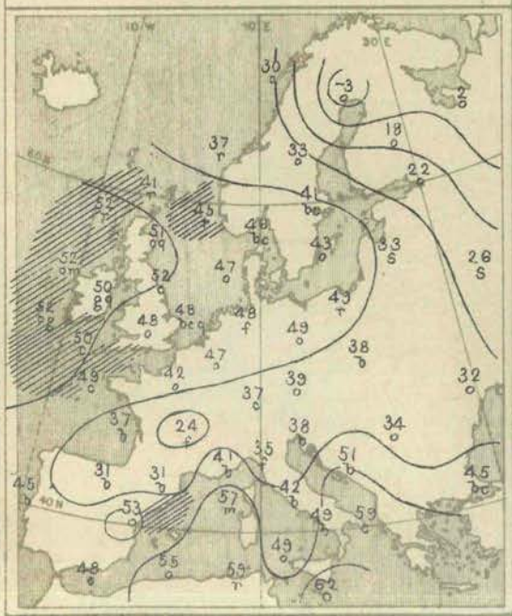
Temperature risen rapidly over Great Britain, Sweden, and Denmark, and to a less extent in other parts of north-western and northern Europe, fallen elsewhere. Morning readings highest, (1) 62° at Malta, 57° at Sfax, and 53° at Lesina and Algiers; 54° at Leith and Shields, and 53° at Nairn, York, Donaghadee, and Liverpool; above 50° in all the more western and northern parts of the United Kingdom. Rising during day to 55° or more at several of our northern and central stations, and reaching 58° at Shields, Loughboro', and Cambridge, and 60° to 65° over Italy and Algeria, but maxima below 50° at many of the French stations.

Wind Westerly or South-Westerly over our Islands, the North Sea, Denmark, Germany, and the Baltic; strong in force in many places—a gale at Wisby—strong to a gale from the Southward over Finland and Lapland; light anticyclonic winds reported over France, the Bay of Biscay, and central Europe, Easterly to Northerly breezes over southern Europe and the Mediterranean. Increasing in force from the South-Westward and Westward over the north-western parts of the British Islands, and becoming squally.

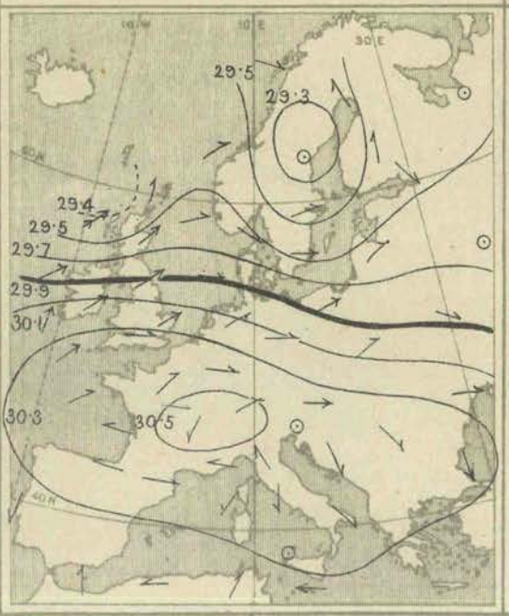
Barometer highest, 30·5 ins. and more to 30·2 ins. in an anticyclone stretching in from the Atlantic over Spain, France, and the southern parts of the British Isles to central and south-eastern Europe. Lowest, 29·1 ins. and less in a depression over Lapland, and below 29·4 ins. in a long "V" stretching thence in a southerly direction over the Gulf of Bothnia to the Baltic; 30·1 ins. and less in the extreme south of Spain, 30·13 ins. at Malta. Rising a little over France during the day, falling decidedly in Norway and Scotland, as a new depression advanced towards Scandinavia.

Wednesday, 29th November.

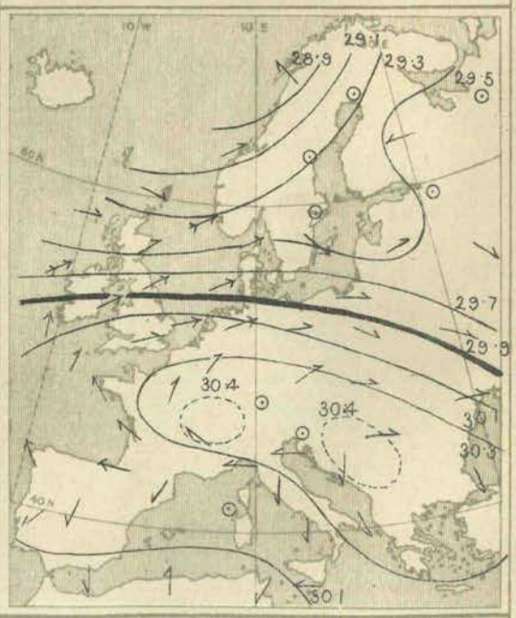
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather cloudy or overcast in all but the southern countries, with rain in the Shetlands, Hebrides, and west of Norway, as well as at some of the German stations, and with snow at Riga and Moscow. Fine and bright over Spain, Italy, and the south of France, but cloudy at most of the Algerian stations, and rainy at La Calle. Rain later in many parts of the United Kingdom—heavy at Stornoway. Large quantities in Algeria also.

Temperature fallen in the west and north of our Islands and more decidedly in Italy and the south of France, risen in most other localities. Morning readings highest, 62° at Malta, 59° at Brindisi and La Calle, and 55° at Algiers; 50° to 54° in all the more western and northern parts of the United Kingdom. Lowest, – 3° Fahr. at Haparanda, + 2° at Archangel, 12° at Uleaborg, and 18° at Kuopio; below the freezing point over Russia generally. Rising later to between 55° and 59° in the north of Scotland, but remaining below 50° in the south-east of England, as well as at several of the French stations; maximum only 29° at Lyons, but exceeding 60° over Mediterranean.

Wind fresh or strong from the South-Westward over our Islands, with a gale in the Hebrides; moderate to strong from South-West or West over Denmark, Germany, the Baltic, and the south of Scandinavia; light from the Southward in Finland and Lapland. Light Easterly in the west and south of France, and North-Easterly in Spain, but variable in Italy, and Southerly in Algeria. Subsequently increasing to a fresh or strong gale from the South-Westward on our extreme north and north-west coasts; no important change occurring elsewhere.

Barometer highest, 30·5 ins. and upwards over Switzerland and the east of France; 30·3 ins. and upwards in an anticyclone covering a considerable portion of central and southern Europe, and extending northwards over the south of England. Lowest, 29·2 ins. and less in a depression over the north of Sweden; 29·4 ins. and less in another disturbance off the north of Scotland; gradients very steep over the northern parts of our Islands. Depression off north of Scotland subsequently moving north-eastwards, and barometer rising again on our extreme northern coasts, falling in south and south-east.

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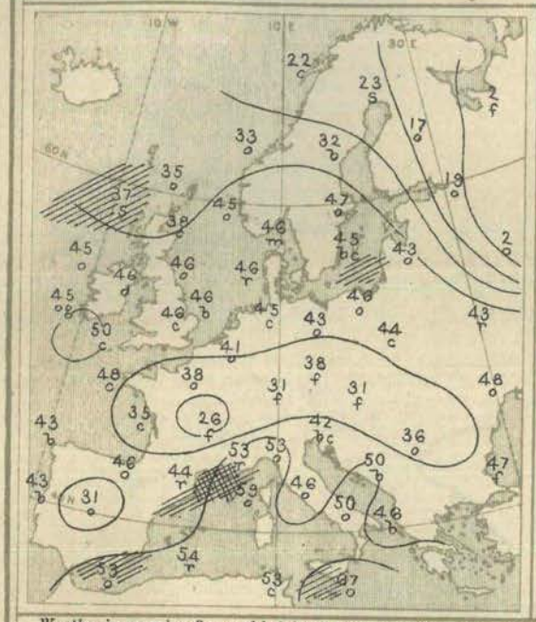
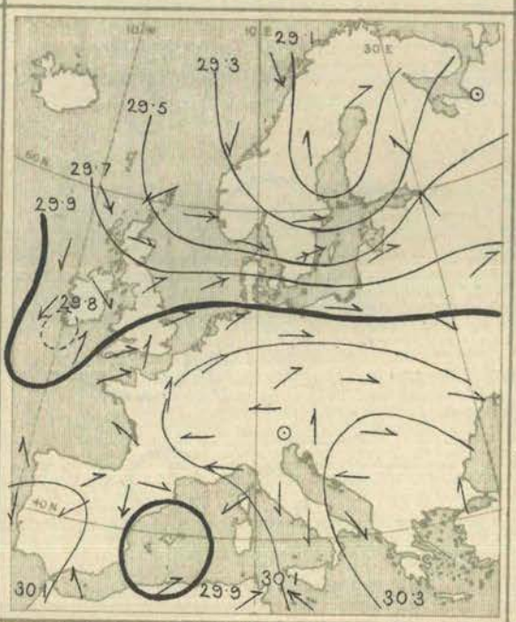
Thursday, 30th November.

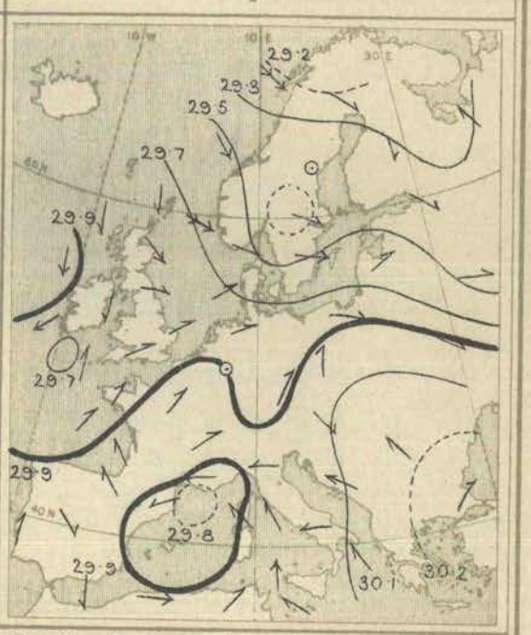
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright in Portugal and at some stations in England and Scotland, but unsettled over Europe as a whole. Fog very prevalent over Austria and south Germany, rain in several parts of the United Kingdom, the Netherlands, Denmark, and Finland, also in the south of France and at Algiers; snow at Stornoway. Rain and wet snow later over England and Ireland, snow in Scotland. Amount of fall large at Stornoway and in the south of Ireland, as well as at very many of the Mediterranean and Adriatic stations.

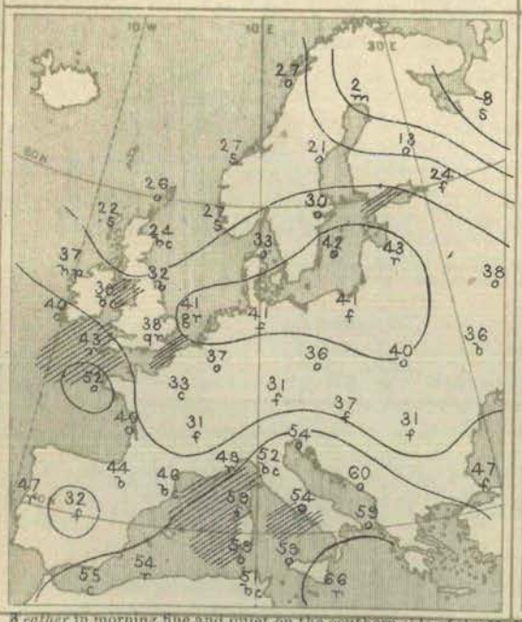
Temperature fallen fast in Norway, Scotland, and Ireland; morning readings low in many places; highest, 67° at Malta, 57° at Barcelona, and above 50° at several Mediterranean stations, 50° to 51° on some parts of our south-western coasts. Lowest, (1) 2° Fahr. at Archangel and Moscow, 17° at Kuopio, 22° at Bodö; (2) 26° at Lyons, 28° at Limoges and Le Mans. Falling fast in Ireland and Scotland later, and fall spreading south-eastwards, but rising to more than 70° in Sicily and Malta.

Wind light and anticyclonic over south-eastern Europe; stronger and cyclonic elsewhere, (1) North-Westerly to Northerly in Scotland and Ireland, South-Westerly to Southerly over England, the north of France, and the Netherlands; (2) Northerly in Norway, Westerly over the North Sea and Baltic, Southerly and South-Easterly over Scandinavia. Another cyclonic circulation over the western parts of the Mediterranean. The Northerly wind at our western and northern stations becoming stronger later, and spreading gradually over England.

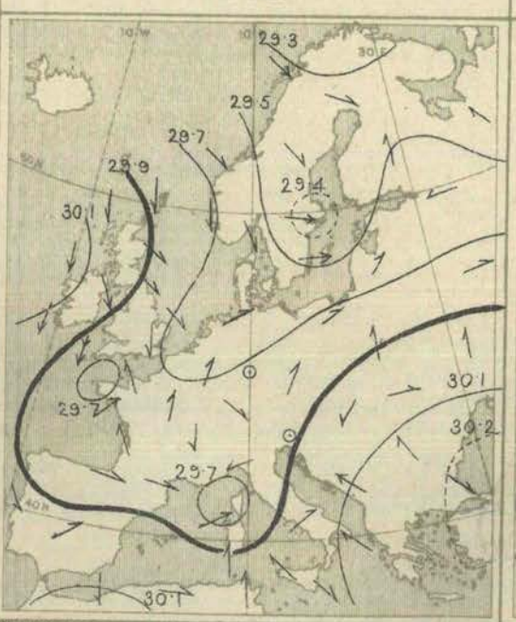
Barometer highest, 30·3 ins. and more over south-eastern Europe, and exceeding 30·0 ins. over France, Germany, and Austria. Lowest, 29·0 ins. over Lapland, below 29·4 ins. over the Shetlands, below 29·8 ins. over the south of Ireland, and also over the western parts of the Mediterranean. Rising over Scotland, Ireland, and Norway later, falling over France and Germany.

Friday, 1st December.

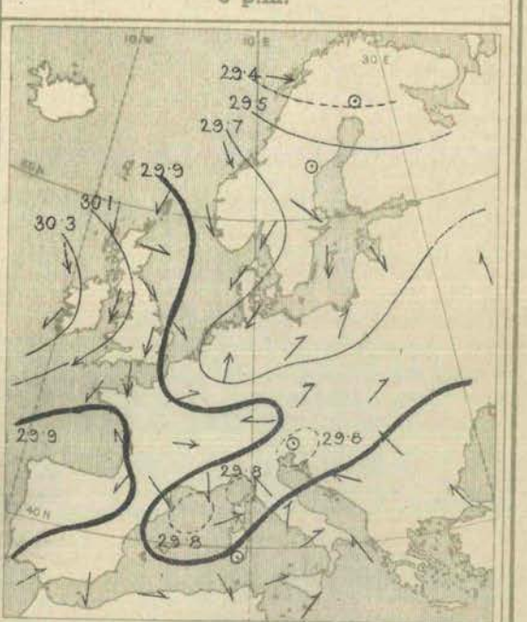
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and quiet on the southern side of the Mediterranean and several parts of France, as well as in the south of Russia; very changeable and unsettled elsewhere. Rain falling in the Riviera, in several parts of England, and in the Baltic Provinces, snow at several stations in the United Kingdom and at Archangel; fog prevalent in many parts of France and Germany. Cold rain and snow showers both over the southern and northern parts of our Islands later, as well as over the northern parts of France and Germany; considerable rain over Italy and the south of France also.

Temperature falling decidedly over the United Kingdom, Scandinavia, and north Germany. Morning readings highest, 66° at Malta; exceeding 50° at many stations on the shores of the Mediterranean and Adriatic, 52° at Lorient and Brest, 46° on the south-east coast of England. Lowest, (1) − 8° Fahr. at Archangel, + 2° at Haparanda, 13° at Kuopio, 24° at St. Petersburg; (2) 22° at Nairn and Stornoway, 24° at Aberdeen, 32° at Parsonstown, 34° at Loughborough; (3) 26° at Limoges, 31° at Lyons and Munich. Hard frost over the British Islands at night, and cold spreading south-eastwards, but maximum readings ranging from 65° to 72° on the southern side of the Mediterranean.

Wind (1) very light over south-eastern and central Europe and variable in direction; (2) Northerly over the British Islands—strong to a gale over the Irish Channel, but South-Westerly to Southerly, moderate, over the north of France and the Netherlands; (3) North-Westerly in Norway, Westerly over the southern parts of Sweden, South-Westerly in north Germany, Southerly at Kuopio; (4) a separate cyclonic circulation over the northern parts of the Mediterranean. Blowing hard from North on our south-east coasts and in Holland later, and from South at Münster, but subsequently moderating at all our stations.

Barometer highest, 30·2 ins. and more to 30·6 ins. over the Black Sea and south-eastern Europe; 29·9 ins. to 30·1 ins. and more over Ireland, Scotland, and apparently still higher over the adjacent parts of the Atlantic. Lowest, 29·8 ins. and less over Lapland, 29·4 ins. and less near Stockholm, 29·7 ins. and less over Holland and the east of England, as well as over Brittany, and in a depression lying off Marseilles. Rising decidedly over the British Isles, but falling somewhat in Portugal. Atlantic anticyclone spreading more over our Islands.

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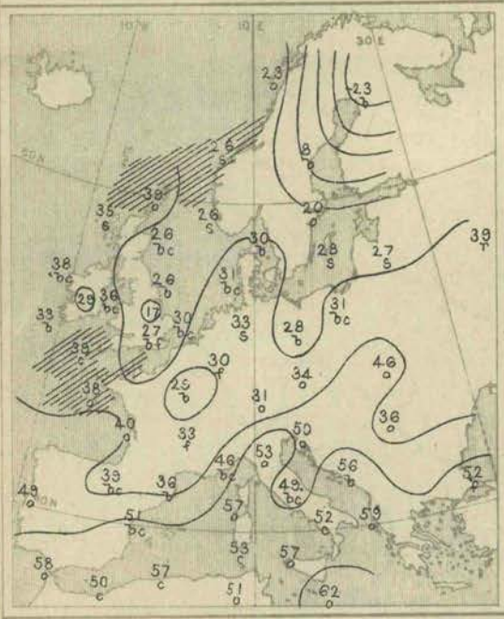
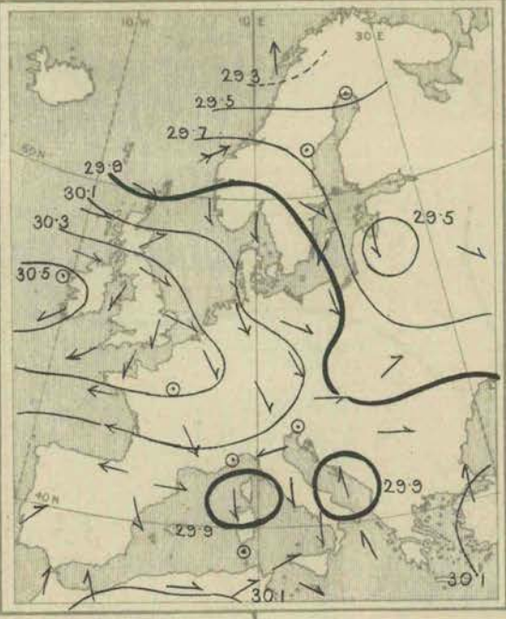
Saturday, 2nd December.

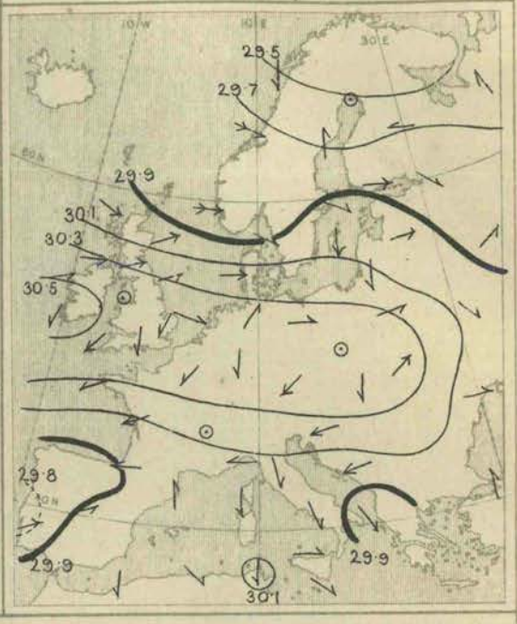
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over Ireland, England, France, north Germany, and the north of Sweden, as well as in some parts of Italy; cloudy and unsettled elsewhere; cold rain or snow falling in the north of Scotland, also over Norway and several parts of the Baltic; low dry fog prevalent at some English stations. Heavy rain later in the Hebrides, the Shetlands, and Norway, and a little snow over Russia. A considerable fall of rain at Madrid.

Temperature fallen rapidly over England and Ireland, risen in Scotland. Morning readings highest, 62° at Malta, and exceeding 50° in the far south only. Lowest, – 23° Fahr. at Haparanda, + 8° at Hernösand, and much below the freezing point over Scandinavia, England, and Ireland. Rising to 50° or nearly so over Scotland and the north of Ireland later, but not touching 40° over the south and east of England; exceeding 60°, however, over Algeria and the south of Italy.

Wind light and anticyclonic over the greater part of the British Isles, but strong Westerly in the far north, and blowing a gale from West-South-West at Christiansund; a Northerly gale blowing over the Baltic and a Westerly gale at Breslau. Fresh to strong breezes from East over the Bay of Biscay. A Westerly to North-Westerly gale felt over the Shetlands and north of Scotland later, and the Westerly wind spreading Southwards to the north of England.

Barometer highest, 30·5 ins. and more to 30·1 ins. in the eastern part of an anticyclone spreading eastwards from the Atlantic over Ireland and England to the north of France and western Germany. Lowest, 29·3 ins. and less over Lapland, 29·5 ins. and less in a small depression near Riga, 29·9 ins. and less over Corsica and the west of Italy. Falling at our northern stations later, rising in the south. Anticyclone moving southwards a little.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force is indicated thus: ⟿ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze: and ⊙ = a calm. In the left-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Germany, Sweden, and Norway, and 7 a.m. in France, Algeria, Italy, Austria, and Russia; that for 6 p.m. is prepared from observations made at 6 p.m. in the British Islands and France, 7 p.m. in Algeria, 8 p.m. in Sweden and Norway, Germany, and Austria, and 9 p.m. in Russia, Belgium, and Italy. The time indicated in each case is the standard time for each country

GENERAL NOTES.

The principal meteorological features of this week have been (1) the advance of large depressions over northern Europe from the westward and their subsequent movement south-eastward over Russia—while their secondary systems (often "V" shaped and of a complex character) have moved from north-west from south-east over the United Kingdom and France to Germany. The principal results of these conditions have been heavy falls of rain and snow in the extreme north, and showers alternating with short periods of bright weather over the more southern and eastern countries; great and repeated changes of temperature over the British Isles, and on some occasions hard frost at night.

During the major part of the week these conditions were accompanied by high-pressures over western and central Europe, but, after Wednesday, depressions were developed over the Mediterranean and the Spanish Peninsula also, and brought about disturbed weather in those regions, as well as in the north and east.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 284.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	10·9	?	21	?	EASTBOURNE	16·1	?	28	?
OSWALDKIRK (Yorkshire)	8·8	?	16	?	TENBY	12·4	?	22	?
WORKSOP	10·9	+ 2·9	20	+ 4	NEWQUAY	17·0	?	29	?
THURCASTON (Leicestershire)	10·5	+ 2·8	19	+ 4	TORQUAY	17·9	?	31	?
MARGATE	12·3	?	22	?	ARLEY COTTAGE (County Cavan)	15·6	?	29	?
WESTBOURNE (Sussex)	11·0	?	19	?	GUERNSEY	11·7	?	20	?
BRIGHTON	16·5	?	29	?					

* The values at Westbourne, Tenby, Torquay and Guernsey are obtained by Jordan's Photographic Recorder.

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WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; R. H. SCOTT, F.R.S., SECRETARY.

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VOL. X. No. 49.] *Third Series.* WEEK ENDING SATURDAY, 9TH DECEMBER, 1893. [*Price 6d.* *Annual Subscription, post paid, £1 10s. 0d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871-90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the twenty-five years 1866-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the ten years 1881-90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

	DISTRICTS. (See p. 290.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 1st, 1893. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	54	30	47·1	37·9	42·8	4 above.	23	+14	11	−15	2360	+500	673	− 15
	1. SCOTLAND, EAST	55	25	46·6	35·7	41·4	4 above.	13	+ 3	27	− 6	2640	+295	765	+ 28
	2. ENGLAND, N.E.	53	22	47·1	36·2	41·9	3 above.	14	+ 3	26	0	2940	+425	580	− 33
	3. ENGLAND, EAST	50	18	44·7	33·0	39·1	0 (average)	8	− 4	35	+10	3413	+501	695	− 10
	4. MIDLAND COUNTIES	51	15	47·0	32·3	40·0	1 above.	14	0	40	+10	3491	+641	704	− 7
	5. ENGLAND, SOUTH	51	17	46·3	33·7	40·3	1 below.	12	− 8	34	+11	3732	+546	506	− 11
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	51	25	48·2	39·4	43·9	4 above.	24	+10	7	−13	2906	+469	506	− 13
	7. ENGLAND, N.W.	52	23	48·3	38·9	43·8	3 above.	26	+12	9	−10	3390	+742	413	− 85
	8. ENGLAND, S.W.	52	15	48·9	36·4	42·9	0 (average)	30	+ 7	16	+ 2	3671	+669	337	− 39
	9. IRELAND, NORTH	52	22	47·3	38·1	42·9	2 above.	23	+ 6	11	− 9	3144	+540	385	− 75
	10. IRELAND, SOUTH	54	21	49·7	38·2	44·2	1 above.	31	+ 8	11	− 6	3536	+561	289	− 62
	—CHANNEL ISLANDS	54	33	51·4	41·3	46·6	1 above.	35	− 3	2	− 2	4265	+811	81	− 51

Rainfall.

	DISTRICTS. (See p. 290.)	For the Week. Number of Rainy Days.	Total Fall.	More or less than the mean for the Week.	From Jan. 1st, 1893. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.
			10ths of in.	10ths of ins.			Ins.	Ins.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	7	26	15 more.	234	+ 5	53·3	+ 7·1
	1. SCOTLAND, EAST	6	9	2 more.	185	− 4	25·7	− 4·5
	2. ENGLAND, N.E.	5	4	2 less.	162	−13	19·8	− 5·5
	3. ENGLAND, EAST	5	4	2 less.	160	−13	19·8	− 5·0
	4. MIDLAND COUNTIES	5	4	2 less.	151	−19	18·4	− 8·9
	5. ENGLAND, SOUTH	5	5	1 less	151	−14	21·5	− 4·9
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	6	16	3 more.	187	−11	37·9	− 9·7
	7. ENGLAND, N.W.	6	8	0 (average)	176	− 8	28·6	− 4·9
	8. ENGLAND, S.W.	5	7	2 less.	159	−33	30·0	− 8·6
	9. IRELAND, NORTH	6	8	0 (average)	199	−16	31·9	− 3·3
	10. IRELAND, SOUTH	4	10	1 more.	172	−25	28·7	− 3·1
	—CHANNEL ISLANDS	6	8	2 less.	172	−33	25·9	− 6·1

Bright Sunshine.

	DISTRICTS. (See p. 290.)	For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 1st, 1893. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	0	− 5	0	− 13	990	−151	23	− 4
	1. SCOTLAND, EAST	4	− 2	9	− 6	1354	+ 31	32	+ 1
	2. ENGLAND, N.E.	7	0	13	0	1535	+317	36	+ 7
	3. ENGLAND, EAST	11	0	21	0	1793	+310	42	+ 7
	4. MIDLAND COUNTIES	10	+ 1	19	+ 3	1690	+365	40	+ 9
	5. ENGLAND, SOUTH	15	+ 4	26	+ 8	1842	+406	43	+ 9
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	4	− 4	9	− 6	1524	+220	36	+ 5
	7. ENGLAND, N.W.	5	− 2	9	− 2	1485	+195	35	+ 5
	8. ENGLAND, S.W.	14	+ 3	25	+ 6	1928	+372	45	+ 8
	9. IRELAND, NORTH	6	− 3	13	− 7	1347	+137	32	+ 3
	10. IRELAND, SOUTH	7	− 4	13	− 8	1493	+ 88	35	+ 2
	—CHANNEL ISLANDS	15	+ 6	28	+ 9	2241	+417	53	+ 10

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather continued very unsettled, with frequent falls of rain in all parts of the Kingdom. Thunder and lightning were experienced at many of our western and north-western stations towards the end of the period.

Temperature was slightly below the mean in England S., and just equalled it in England E. and England S.W., but in all other districts it was above the normal, the excess in Scotland amounting to 4°. The highest of the maxima were registered on the 6th, and ranged from 55° in Scotland E. to 50° in England E. The lowest of the minima occurred at the commencement of the week, when the thermometer fell to 15° in the Midland Counties and England S.W., 17° in England S., 18° in England E., and to between 21° and 30° in nearly all other districts.

Rainfall greatly exceeded the mean in Scotland N., and was rather more than the normal in the other Scotch districts and in Ireland S. In most other districts there was a slight deficit.

Bright Sunshine was much less prevalent than during the preceding week; it slightly exceeded the mean value in most parts of England, but showed a deficit in Ireland and Scotland. The percentage of the possible duration ranged from 28 in the Channel Islands, and 26 in England S. and S.W., to 9 in Scotland E. and W. and in England N.W., while in Scotland N. the percentage was less than 0·5.

Barometer and Wind.—During the earlier part of the period the distribution of pressure over our south-western and western districts was anticyclonic, and the winds over our Islands South-Westerly or Westerly in the north and Westerly or North-Westerly in the south. As the week progressed, however, the anticyclone moved away south-eastwards, some deep depressions appeared in the north-west, and strong South-Westerly winds and gales set in on nearly all our coasts. The gale caused by the depression of Friday was very severe in the north and north-west, and at 4 p.m. the barometer at Stornoway fell to the unusually low value of 27·07 ins.

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II.—DATA from which the SUMMARY on page 289 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°				Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head ℳ	49	34	45·9	37·7	42·0	+ 2·5	11	12	7	1·90	+0·94	*	*	*	*
	Stornoway ℳ	53	32	48·0	37·7	43·1	+ 3·6	26	12	7	2·04	+0·80	0·5	-5·4	1	-13
	Wick ℳ	51	30	46·1	35·4	41·0	+ 2·8	11	28	6	0·78	+0·10	*	*	*	*
	Lairg $												*	*	*	*
	Glencarron $												*	*	*	*
	Fort Augustus $	54	33	47·9	38·5	43·4	+ 4·0	25	10	7	3·76	+2·71	0·0	?	0	?
	Fort William $	52	35	47·8	40·4	44·3	+ 4·7	23	4	7	4·66	+2·68	0·1	?	0	?
1. SCOTLAND, E.	Nairn ℳ	55	28	47·7	36·0	42·1	+ 4·0	26	17	6	0·68	+0·20	*	*	*	*
	Aberdeen ℳ	53	26	47·0	36·6	42·0	+ 3·7	23	15	5	0·36	-0·34	6·4	- 2·4	14	- 6
	Braemar $	50	28	43·3	35·5	40·0	+ 4·8	4	28	6	1·39	+0·65	0·3†	?†	1†	?†
	Ochtertyre $	53	27	47·1	34·9	41·2	+ 4·0	14	30	5	1·36	+0·41	*	*	*	*
	Leith ℳ	53	25	48·4	36·1	42·5	+ 2·5	28	17	6	0·73	+0·33	*	*	*	*
	Marchmont $	50	30	46·0	34·9	40·7	+ 3·6	11	29	6	0·66	-0·08	7·0	?	15	?
2. ENGLAND, N.E.	Alnwick Castle ℳ	51	30	46·7	37·6	42·3	+ 3·5	21	12	5	0·49	-0·23	*	*	*	*
	Durham ℳ	51	31	47·7	36·6	42·4	+ 4·5	25	15	4	0·30	-0·40	11·0	+ 1·1	22	+ 2
	Shields ℳ	53	23	48·3	35·6	42·2	+ 2·5	28	18	4	0·27	-0·34	*	*	*	*
	Scarborough ℳ												*	*	*	*
	York ℳ	51	22	47·4	34·4	41·2	+ 3·0	15	32	6	0·78	+0·28	4·4	- 1·2	8	- 3
	Spurn Head ℳ	48	28	45·3	36·9	41·3	+ 1·2	9	22	6	0·21	-0·29	*	*	*	*
3. ENGLAND, E.	Hillington ℳ	48	20	43·1	33·2	38·4	+ 0·2	3	33	6	0·40	-0·19	10·3	+ 1·8	19	+ 2
	Yarmouth ℳ	47	23	44·0	34·3	39·3	- 0·3	6	29	6	0·44	-0·13	*	*	*	*
	Geldeston ℳ	49	20	45·0	33·6	39·5	0·0	8	33	6	0·32	-0·26	9·1	- 2·1	17	- 4
	Cambridge ℳ	50	19	46·4	31·9	39·4	+ 0·7	12	40	3	0·19	-0·26	12·0	+ 1·9	22	+ 4
	Rothamsted ℳ	48	18	45·0	31·8	38·7	0·0	8	40	5	0·38	-0·18	14·1	?	26	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall) ℳ	51	27	48·3	32·9	40·9	+ 2·7	18	38	5	0·21	-0·29	*	*	*	*
	Loughborough ℳ	51	17	47·3	30·4	39·3	+ 0·6	16	47	5	0·58	+0·09	*	*	*	*
	Stamford (Ketton Hall) ℳ	51	18	46·7	30·7	39·0	+ 0·3	13	45	5	0·18	-0·39	*	*	*	*
	Cheadle ℳ	49	24	46·1	34·2	40·4	+ 2·4	11	32	5	0·55	-0·34	*	*	*	*
	Churchstoke ℳ	50	19	47·5	35·7	41·8	+ 2·9	15	27	6	0·91	+0·16	9·7	+ 1·5	18	+ 2
	Hereford ℳ	51	18	48·5	33·1	41·1	+ 1·2	18	38	5	0·44	-0·12	*	*	*	*
	Cirencester ℳ	49	15	45·9	29·1	37·8	- 0·6	11	50	5	0·25	-0·40	9·6	+ 0·6	18	+ 1
	Oxford ℳ	50	21	45·7	32·4	39·3	- 0·1	10	38	3	0·19	-0·33	12·4	+ 4·1	23	+ 7
5. ENGLAND, S.	London ℳ	50	20	46·0	33·4	40·0	- 0·2	11	35	3	0·41	-0·07	8·5†	+ 3·6†	16†	+ 8†
	North Foreland ℳ	49	25	45·4	34·7	40·3	- 0·6	10	30	3	0·65	?	*	*	*	*
	Strathfield Turgiss ℳ	48	17	45·0	30·4	38·0	- 1·0	8	45	7	0·64	+0·13	*	*	*	*
	Dungeness ℳ	50	23	46·7	34·1	40·7	- 0·7	13	33	5	0·55	-0·13	*	*	*	*
	Hastings (St. Leonards) ℳ	51	28	46·5	35·8	41·4	+ 0·1	13	27	3	0·58	-0·11	16·0	+ 4·0	29	+ 7
	Southampton ℳ	51	21	47·4	34·2	41·1	- 0·1	15	33	5	0·54	-0·16	15·1	+ 5·7	27	+ 9
	Hurst Castle ℳ	50	24	46·9	34·6	41·0	- 1·3	14	31	4	0·58	-0·07	*	*	*	*
	Stowell ℳ	49	18	46·4	32·1	39·5	- 0·4	12	39	6	0·23	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart) $	51	33	48·6	39·9	44·4	+ 3·9	26	6	7	3·45	+1·27	*	*	*	*
	Glasgow ℳ	50	33	47·2	39·7	43·6	+ 4·7	21	6	6	1·49	+0·30	3·0	- 0·5	6	- 1
	Ardrossan ℳ	51	25	48·4	39·9	44·3	+ 3·5	25	6	6	1·02	+0·17	*	*	*	*
	Glenlee $	51	32	48·1	36·5	42·5	+ 4·5	27	15	5	1·20	-0·27	*	*	*	*
	Douglas (Isle of Man) ℳ	51	36	48·5	40·9	44·9	+ 3·1	25	3	6	0·87	-0·20	5·8	- 4·9	11	- 9
7. ENGLAND, N.W.	Stonyhurst ℳ	49	27	?47·0	37·7	?42·5	?+3·5	?22	12	7	1·47	+0·39	5·0	- 1·8	10	- 3
	Blackpool ℳ	?51	23	?48·9	38·6	?44·0	?+ 4·1	?28	10	7	0·56	-0·15	*	*	*	*
	Manchester ℳ	50	24	47·4	35·8	41·8	+ 3·0	15	27	7	0·82	+0·03	3·1†	?	6†	?
	Liverpool Obsy. (Bidston) ℳ	51	27	48·0	37·9	43·2	+ 2·6	26	11	7	0·70	+0·10	*	*	*	*
	Llandudno ℳ	52	35	49·3	40·7	45·2	+ 2·6	28	4	4	0·75	-0·03	6·3	- 0·4	12	0
	Holyhead ℳ	51	36	49·1	42·6	46·0	+ 2·2	28	0	5	0·66	-0·19	*	*	*	*
8. ENGLAND, S.W.	Llandovery ℳ	51	15	48·7	30·9	40·2	- 1·0	19	46	5	1·22	+0·05	*	*	*	*
	Pembroke ℳ	52	33	50·1	41·1	45·8	+ 1·2	30	3	6	1·38	+0·43	8·9	- 1·6	16	- 3
	Bristol (Montpelier) ℳ	51	21	47·8	36·3	42·3	+ 1·9	26	16	4	0·37	?	*	*	*	*
	Arlington (N. Devon) ℳ	51	21	47·7	34·1	41·2	0·0	16	34	5	1·04	-0·32	*	*	*	*
	Cullompton ℳ	52	17	48·9	33·7	41·6	+ 0·7	19	36	5	0·23	-0·61	11·4	+ 4·0	21	+ 7
	Falmouth ℳ	52	27	49·9	39·8	45·1	- 0·1	31	6	4	0·67	-0·53	16·8	+ 4·8	30	+ 8
	Plymouth ℳ	52	24	49·3	38·4	44·1	+ 0·6	30	10	4	0·48	-0·37	18·4	+ 7·2	33	+12
	Prawle Point ℳ	51	26	48·7	37·1	43·1	- 0·6	28	14	5	0·44	-0·42	*	*	*	*
9. IRELAND, N.	Malin Head ℳ	51	35	47·3	41·4	44·5	+ 3·7	20	2	7	1·07	?	*	*	*	*
	Londonderry ℳ	52	33	47·0	38·2	42·8	+ 2·6	22	11	7	1·17	+0·24	*	*	*	*
	Edenfel (Omagh) ℳ												*	*	*	*
	Belmullet ℳ	52	36	49·0	41·1	45·2	+ 0·5	26	3	7	1·15	?	*	*	*	*
	Markree Castle ℳ	51	29	47·0	37·3	42·3	+ 2·3	22	13	7	0·96	+0·18	4·5	- 3·0	9	- 9
	Brookeborough ℳ	51	32	46·9	38·0	42·6	+ 4·0	21	11	6	0·61	-0·37	*	*	*	*
	Armagh ℳ	51	32	47·3	37·5	42·6	+ 3·5	23	12	5	0·58	-0·10	6·6	- 2·7	13	- 6
	Donaghadee ℳ	52	32	48·6	36·6	42·8	+ 1·1	28	15	5	0·27	-0·41	*	*	*	*
	Edgeworthstown ℳ	48	30	44·7	34·4	39·8	+ 0·1	8	30	6	0·78	-0·02	*	*	*	*
10. IRELAND, S.	Dublin ℳ	53	34	49·1	40·3	44·9	+ 2·8	27	5	3	0·35	-0·25	11·7	- 0·3	22	0
	Parsonstown ℳ	52	21	?48·3	?35·9	?42·4	+ 2·2	?28	?17	4	0·75	+0·05	4·0	- 5·9	8	-12
	Kilkenny ℳ	52	21	48·6	33·7	41·5	- 0·1	18	36	5	0·63	-0·05	*	*	*	*
	Waterford ℳ	52	15	49·6	35·5	42·8	- 0·6	33	18	3	0·74	-0·23	*	*	*	*
	Roche's Point ℳ	52	31	49·7	39·1	44·6	+ 0·3	30	8	4	1·52	+0·39	*	*	*	*
	Valencia ℳ	54	29	51·3	41·6	46·6	+ 0·3	34	1	5	0·96	-0·33	5·2	- 4·6	10	9
	Killarney ℳ	54	28	51·4	39·4	45·6	+ 2·4	36	7	6	1·83	?	*	*	*	*
	Foynes ℳ	52	33	49·4	40·0	44·9	+ 3·1	29	6	5	1·03	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's) ℳ	53	33	51·7	42·9	47·5	+ 0·4	39	0	5	0·85	-0·05	*	*	*	*
	Jersey ℳ	54	34	51·0	39·7	45·6	+ 0·7	35	6	6	0·65	-0·26	17·7	+ 5·9	31	+9

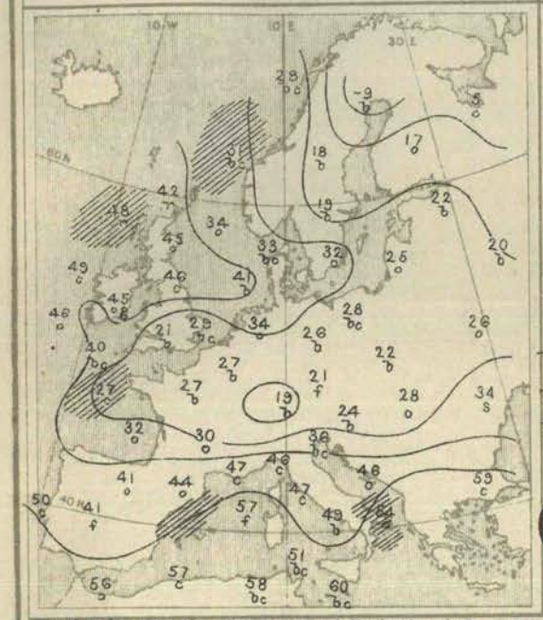
Stations marked ℳ are in connection with the Royal Meteorological Society, and those marked $ with the Scottish Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

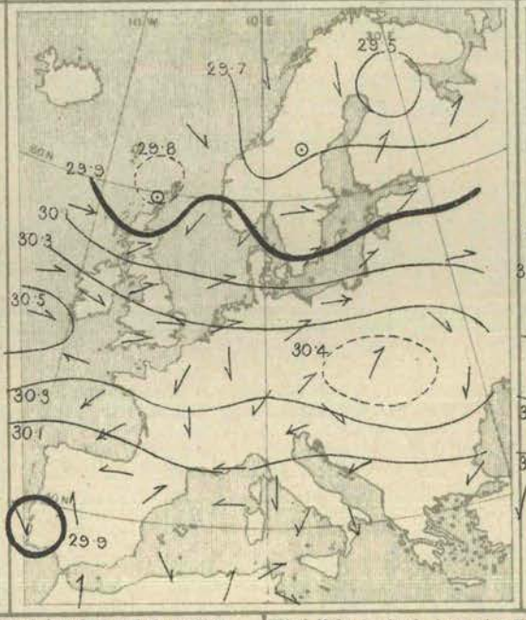
† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row) at the Kew Observatory, and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

Sunday, 3rd December.

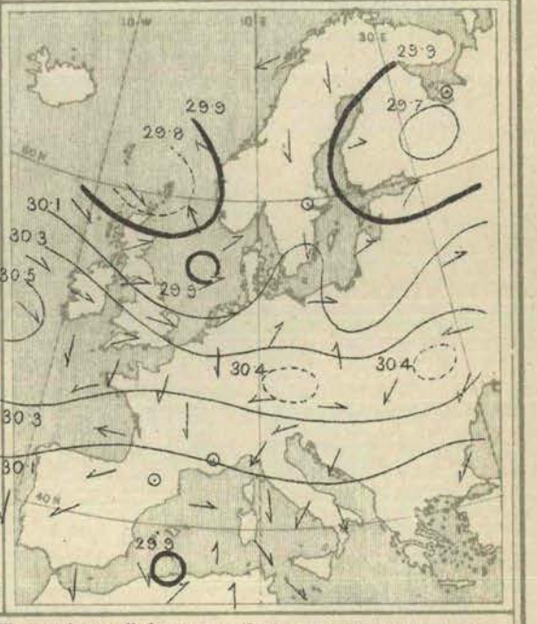
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fine over the greater part of England and the Continent, but dull and showery in Ireland and Scotland. Dull also over Spain, the south of France, and the northern and extreme southern parts of Russia, with rain at Nicolaieff and snow at Odessa. Sky clearing later in the south of Ireland, but dull weather spreading to nearly all parts of Great Britain, with slight rain in many places. Considerable amounts of rain falling in the south of France, and snow in Finland.

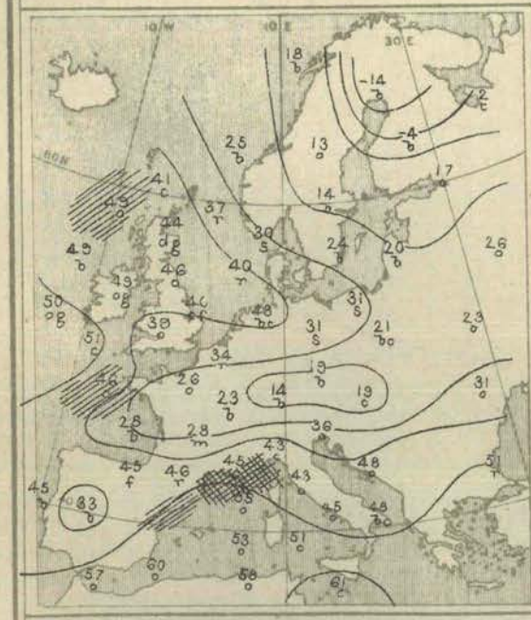
Temperature risen rapidly in the north and north-west of our Islands, and to a less extent over Scandinavia and northern Russia; fallen in most other localities. Morning readings highest, 65° at Sfax, 60° at Malta, and 58° at La Calle, above 50° at several of the Mediterranean stations, and very little below it in Scotland and the north of Ireland. Lowest, (1) − 9° Fahr. at Haparanda, + 5° at Archangel, and 11° at Ulealborg; (2) 21° in London, and 24° at Dungeness and Oxford; below the freezing point over the greater part of England. Rising during day to 50° or a little above at several of our own western and northern stations, but remaining below 40° in the south-east of England. Exceeding 55° in Spain and the south of Italy.

Wind light to fresh from the Westward over all the more northern and eastern parts of our Islands; South-Westerly over Denmark, the Baltic, Finland, and north Germany, with a gale at Memel; North-Westerly or Northerly over Norway and the north of Sweden, as well as in the south of Russia, Easterly or North-Easterly over the south-west of England, and also over France and northern Italy, Northerly in the south of Italy, variable in Spain, Southerly in Algeria. Subsequently veering to the North-Westward in many parts of our Islands, no important change occurring elsewhere.

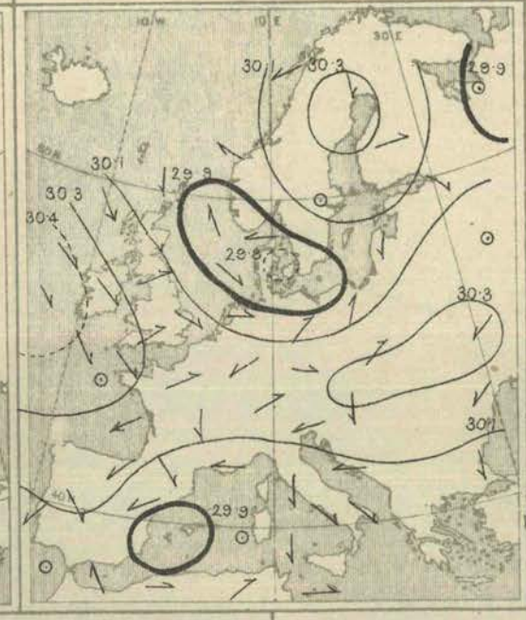
Barometer highest, 30·5 ins. and upwards in the south of Ireland; 29·3 ins. to 30·4 ins. and upwards in a long band stretching from the Atlantic across Ireland, England, and the north of France, to northern Austria and the south-west of Russia. Lowest, 29·5 ins. and less in a depression over Lapland, 29·8 ins. and less in a small shallow system near the Shetlands; 29·9 ins. and less in another system over the south of Portugal. No important change occurring during day, but secondary depressions appearing over Denmark and the North Sea.

Monday, 4th December.

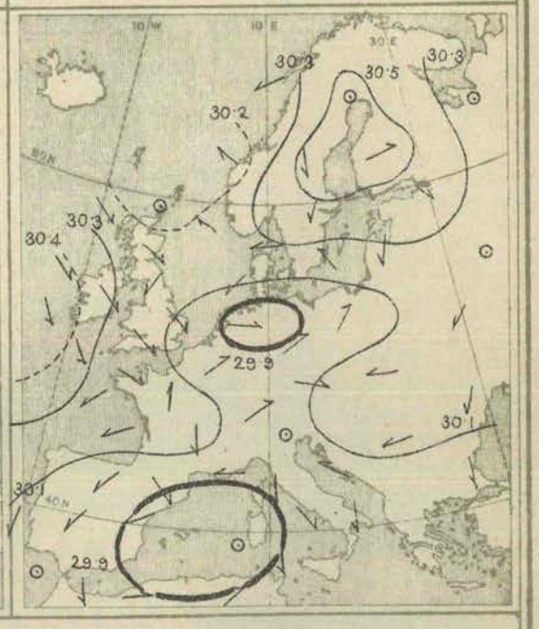
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather dull and damp over the United Kingdom, with fog or mist and slight rain at several stations; dull also over the greater part of Russia, Italy, and the south of France; rainy in Denmark, as well as at Perpignan; snow falling in north Germany. Fine and bright in Finland, Scandinavia, south Germany, Spain, and central France. Sky clearing later in the west of our Islands, but slight rain falling in many parts of Great Britain and France, and snow in the southern parts of Sweden and Russia.

Temperature risen quickly over England, Ireland, and the north of France, but fallen in most other countries. Morning readings highest, (1) 61° at Malta, 60° at Algiers, 58° at La Calle, and 57° at Oran; (2) 51° at Scilly and Ardrossan, 50° at Valencia (Ireland) and Pembroke; Lowest, − 14° Fahr. at Ulealborg, − 9° at Haparanda, − 4° at Kuopio, and + 2° at Archangel; below 20° at some of the German and Austrian stations, and below the freezing point in most parts of northern, eastern, and central Europe. Rising during day to 50° or a little above it at several of our own western and northern stations, but remaining below 45° in the south-east of England, and below 40° in the central parts of France.

Wind light to moderate from the North-Westward over our Islands, and from the South-Westward over the Netherlands and Germany, Easterly or South-Easterly in Norway and the south of Sweden. Light from the North-Westward over Finland and from the North-Eastward in the south of Russia. North-Easterly over France, Spain, and northern Italy, North-Westerly in the south of Italy; variable in Austria and also in Algeria. No important change occurring during day.

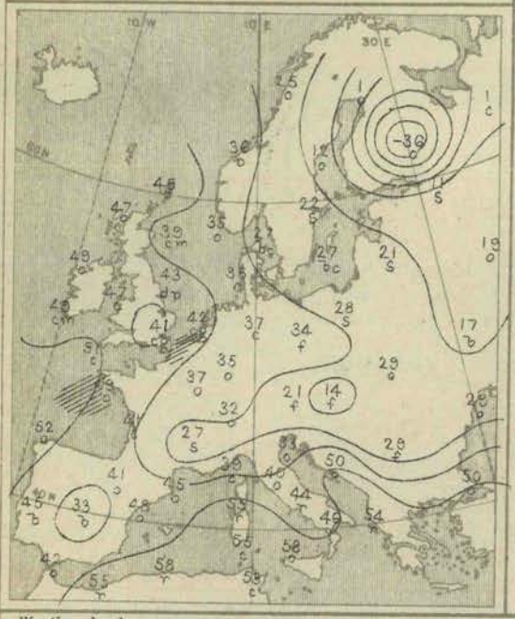
Barometer highest, 30·4 ins. and upwards in an anticyclone extending over the south-western parts of Ireland from the Atlantic; 30·3 ins. in two other systems, one lying over the north of Sweden and the other over western Russia. Lowest, 29·9 ins. and less in three shallow depressions—one lying over the eastern parts of the North Sea, another over the north of Russia, and a third over the western parts of the Mediterranean. First-named depression subsequently moving southwards to Germany, and barometer rising decidedly in Scandinavia and the north of our Islands; no important change occurring elsewhere.

Judd & Co Lt., Lith. 63, Carter lane.

Tuesday, 5th December.

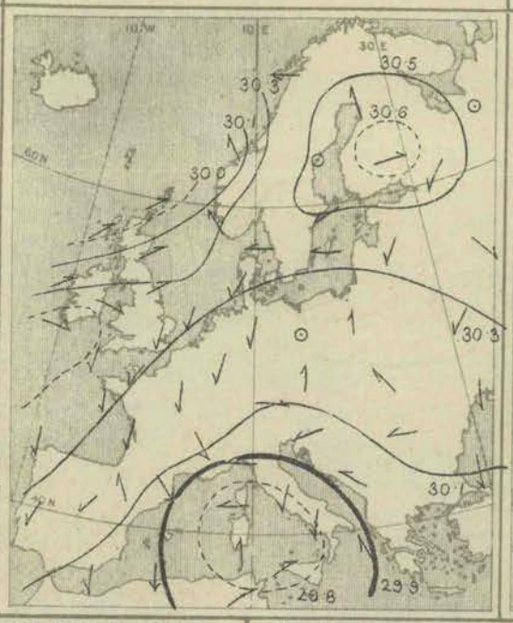
Temperature and Weather.

8 a.m.

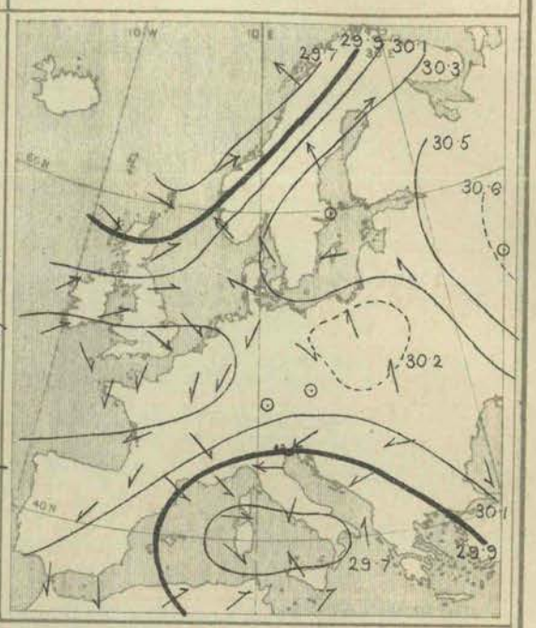


Barometer and Wind.

8 a.m.



6 p.m.



Weather cloudy or overcast in nearly all parts of our Islands and the Continent, with fog or mist over central England, as well as at many of the German and Austrian stations. Rain falling in some parts of Ireland, as well as in Italy; snow reported over the Baltic Provinces, and in some other parts of Russia and north Germany, as well as at Stockholm and at Lyons. Fog very prevalent in Austria and western Germany. Some rain later in the north and north-west of the United Kingdom. Heavy rain occurring in the south of Italy.

Temperature fallen in most countries, but risen at many of the French and German stations. Morning readings highest, 58° at Palermo and Algiers, and 55° at Sanguinaire, Cagliari, and Nemours; above 50° at several of the Mediterranean stations, and very little above that point in the extreme west of our Islands. Lowest, − 36° Fahr. at Kuopio, + 1° at Archangel and Haparanda, 2° at Ulcaborg, and 6° at Helsingfors; below the freezing point over northern, eastern, and central Europe generally, and also over central England. Rising during day to 50° or a little above at several of our own western and northern stations, but remaining below 45° in the south-east of England, and below 40° over central France.

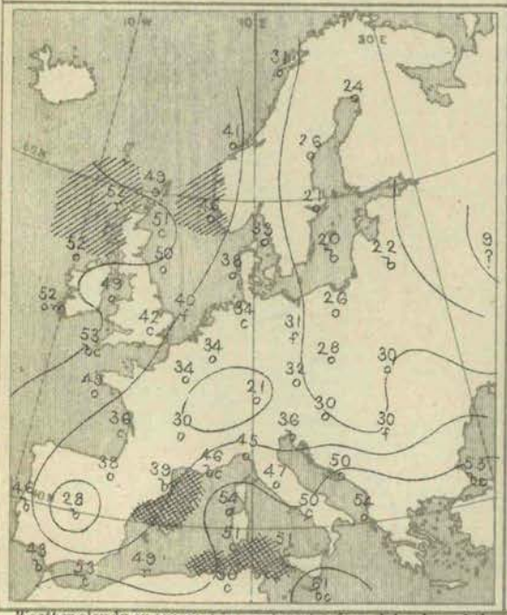
Wind light to moderate from the South-Westward over the northern parts of the United Kingdom; strong from the South-Eastward or Eastward in the west of Norway. North-Easterly over Denmark, north Germany, the Baltic, the Netherlands, the south of England, and the greater part of France and Spain. Light from the South-Eastward in Poland; variable in Austria, Italy, and Algeria. Subsequently increasing to a gale from the South-Eastward in the west of Norway; no important change occurring elsewhere.

Barometer highest, 30·6 ins. and upwards over Finland; 30·4 ins. and upwards over the south of Ireland. Lowest, 29·8 ins. and less in a large but somewhat shallow depression lying over the Mediterranean to the westward of Italy; 30·0 ins. and less in another disturbance lying to the northward of Scotland. Latter system subsequently moving eastwards, and at the same time spreading out in a southerly direction; barometer falling decidedly on our northern coasts.

Wednesday, 6th December.

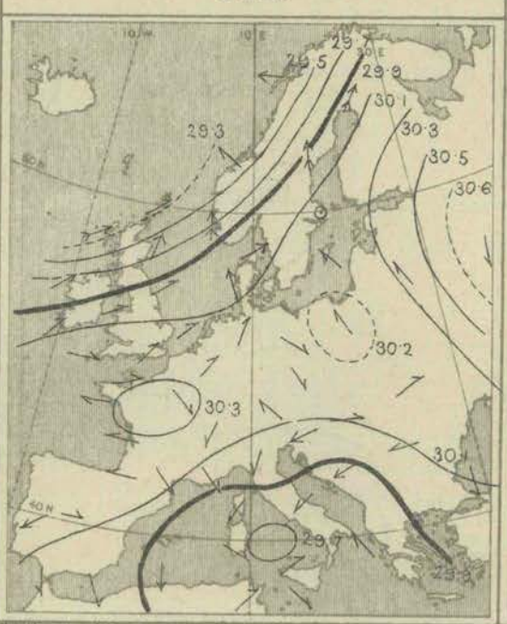
Temperature and Weather.

8 a.m.

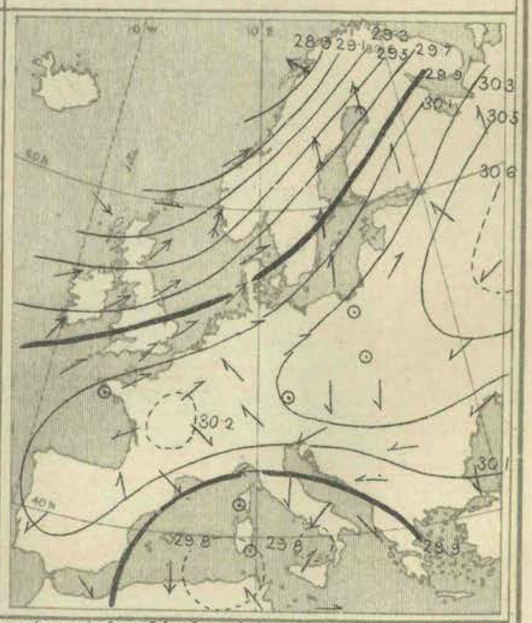


Barometer and Wind.

8 a.m.



6 p.m.



Weather cloudy or overcast in most parts of our Islands and the Continent, with rain at one or two of the Scotch stations, and snow at Faerder and Cracow. Fine at some of the English Channel stations, and also in Spain and the south of France, but rainy in Algeria. Rain falling later in most parts of north-western Europe, and snow at Wick, as well as in Finland and the north of Sweden. Solar halo seen at Hurst Castle during morning, and lightning occurring at night at Ardrossan and Roche's Point.

Temperature fallen a little in France, Germany, and the Netherlands, but risen elsewhere, quickly over England, the south of Norway, and the north of Sweden. Morning readings highest, (1) 61° at Malta, 54° at Brindisi, and 53° at Constantinople and Oran; (2) 53° at Nairn, considerably above 45° in all the more western and northern parts of the United Kingdom. Lowest, 9° at Moscow, 20° at Wisby, and 21° at Stockholm (most of the Russian reports wanting), below the freezing point in most parts of northern, eastern, and central Europe. Rising during day to 50° or a little more over the United Kingdom generally, but remaining below 40° over Belgium, Germany, and central France.

Wind South-Westerly over the greater part of our Islands, and strong to a gale on our extreme north-west coasts; Southerly in Scandinavia and Denmark, with gales in many places. Light from the Westward in the extreme south of England; Easterly in the west of France, and North-Easterly in Spain. Fresh to strong from the North-Eastward or Northward over the northern parts of Italy and the Adriatic, and from the North-Westward in the extreme south of France. Light and variable in Germany and Austria. South-Westerly winds subsequently spreading to all parts of the United Kingdom, and increasing in force on our western and northern coasts.

Barometer highest, 30·6 ins. and upwards in a large anticyclone over central Russia, 30·4 ins. and upwards in a broad band extending across the Baltic and Germany to France, the English Channel, and the Bay of Biscay. Lowest, 29·3 ins. and less in a large depression lying to the northward of Scotland (gradients steep over Scandinavia and the north of our Islands); 29·7 ins. and less in a shallow system lying near Sardinia. Depression in north subsequently moving north-eastwards, but at the same time spreading out in a southerly and south-easterly direction.

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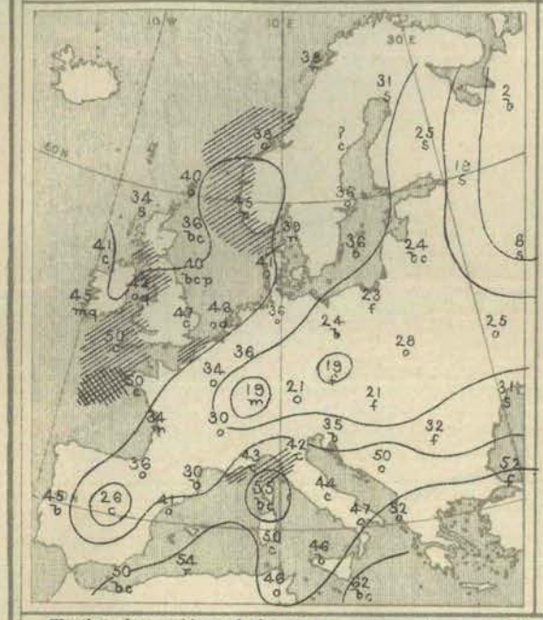
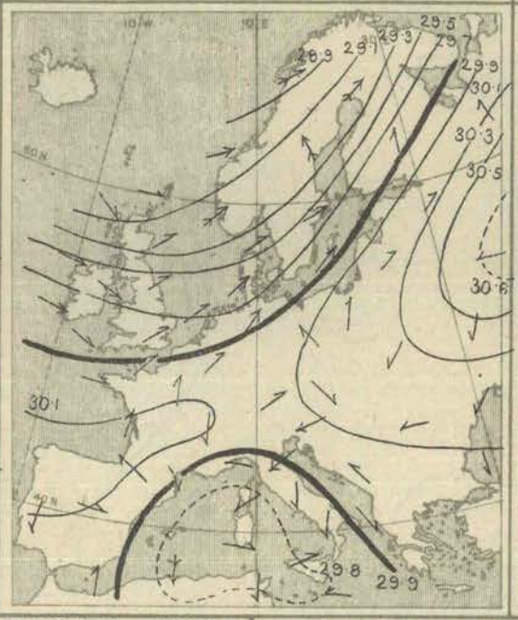
Thursday, 7th December.

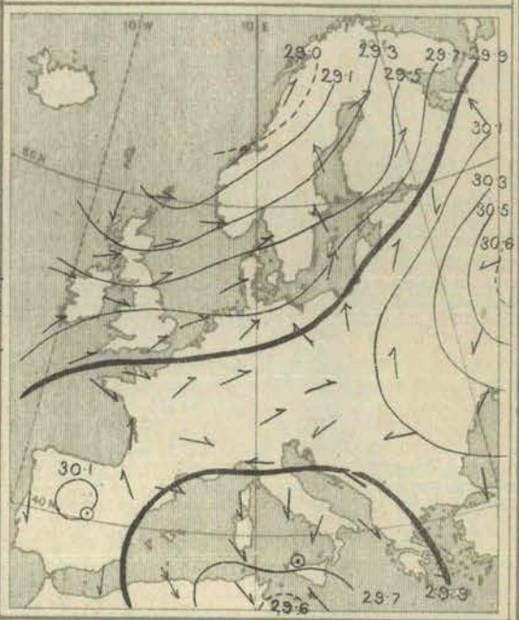
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather changeable and showery over the greater part of the United Kingdom, with hail on our extreme north-west coasts and snow at Stornoway. Dull at most of the Continental stations, with fog in many parts of Germany and Austria, rain in Norway, and snow at most of the Russian stations, as well as at Haparanda. Rain falling also in Algeria. Temporary improvement taking place later over England, but rain setting in over all the more western and northern parts of the Kingdom at night. Heavy rain falling in Sicily and Algeria.

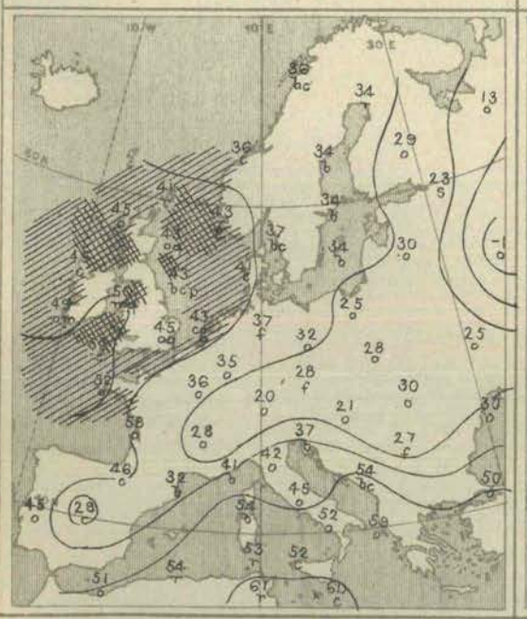
Temperature fallen quickly in the west and north of our Islands, and risen with equal rapidity over Sweden and northern Russia; changes slight elsewhere. Morning readings highest, 62° at Malta, 55° at Sanguinaire, and 54° at Algiers; ranging between 45° and 50° in the extreme south of England. Lowest, 2° at Archangel, 8° at Moscow, 18° at Breslau, 19° at Prague and St. Petersburg, below the freezing point over Russia and central Europe generally, and very little above it in the north of Scotland. Rising during day to 50° or more on our south-west coasts, but remaining below 45° in the north of our Islands, and below 40° over central France.

Wind strong from the Westward on our western coasts, with a gale in the north of Ireland, moderate from the South-Westward over the eastern and south-eastern parts of the United Kingdom. Strong from the Southward or South-Westward over northern Europe, with gales in many places. Light from the Eastward or North-Eastward over the central and southern parts of Russia, variable in Austria, moderate from the North-Westward in Italy, Southerly in the west of France. Subsequently backing to the South-Westward or Southward in the west of our Islands, and increasing to a strong gale at night.

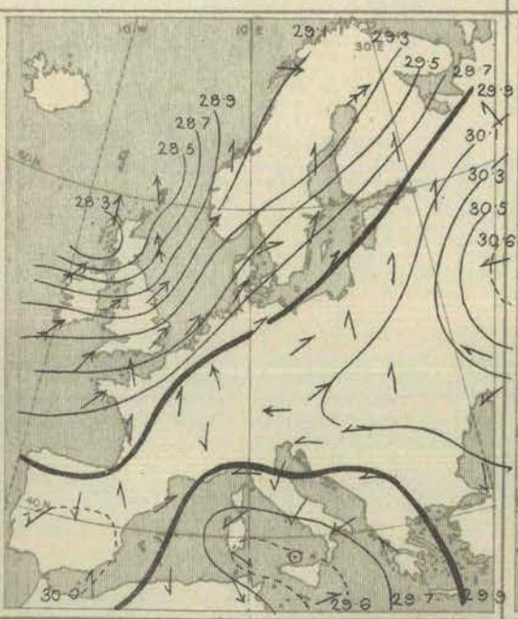
Barometer highest, 30·6 ins. and upwards in an anticyclone lying over central Russia; 30·0 ins. and upwards over Austria, Germany, France, and Spain. Lowest, 28·9 ins. and less in a depression lying off the north-west of Norway (gradients steep over Finland and Sweden, and rather steep over north-western Europe generally); 29·8 ins. and less in a shallow system over the central parts of the Mediterranean. New and deep depression approaching our extreme western coasts in evening; rapid fall of barometer taking place over our Islands at night.

Friday, 8th December.

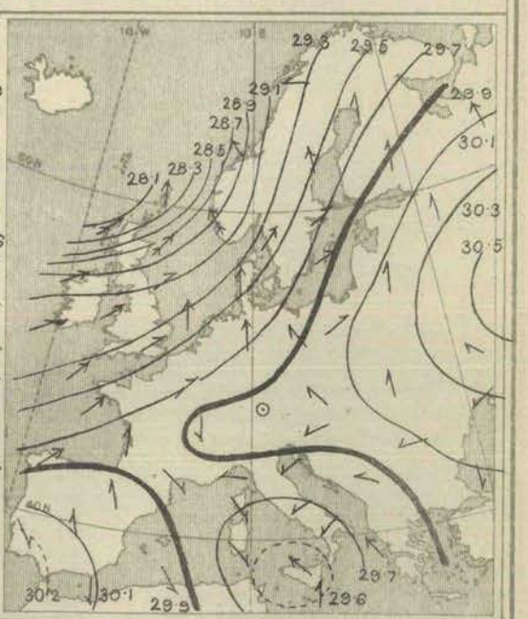
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather dull over the greater part of our Islands and the Continent, with rain and sleet in Scotland, and with passing showers at several of the English and Irish stations. Snow falling over the Gulf of Finland, and rain in some parts of Algeria and Tunis. Fine and bright in the south of France and also on the eastern shores of the Adriatic. Rain or hail falling later over the whole of the United Kingdom, heavily in places. Solar halo seen at Oxford, and lightning occurring in evening or night at many of our western and southern stations, with thunder at Ardrossan.

Temperature risen generally, but fallen in some of the northern countries. Morning readings highest, 61° at La Calle, 60° at Malta, and 59° at Brindisi, above 50° at the Mediterranean stations generally, and also in the extreme south-west of England. Lowest, − 1° Fahr. at Moscow, + 13° at Archangel, 15° at Kharkov, and 20° at Munich; below the freezing point in most parts of Russia, Austria, and Germany, as well as in the central parts of France and Spain. Daily maxima over our Islands ranging between 45° and 53°, but frost occurring in some of the northern and central districts at night.

Wind strong to a gale from the Southward or South-Westward over the whole of our Islands, as well as in some parts of Scandinavia and Finland; gale severe on our extreme north-west coasts. Moderate from the same quarter over Denmark, the Baltic, north Germany, and the west and north of France. Light to moderate from the Eastward or North-Eastward over Italy and the south of Russia, but variable in Austria, and also in Spain and the south of France. Severe gale from the South-Westward blowing later over the whole of Scotland, and violent Southerly gale in the south of Norway. Fresh to strong gale in the south and south-east of England at night.

Barometer highest, 30·6 ins. and upwards in an anticyclone over central Russia, 30·0 ins. and upwards over the whole of Russia, Austria, south Germany, and central France. Lowest, 28·3 ins. and less in a deep depression having its centre to the west of Scotland; gradients steep over the whole of our Islands and the North Sea. Depression subsequently travelling north-eastwards, and barometer at 4 p.m. falling to a minimum of 27·97 ins. at Stornoway, brisk rise taking place in north in evening.

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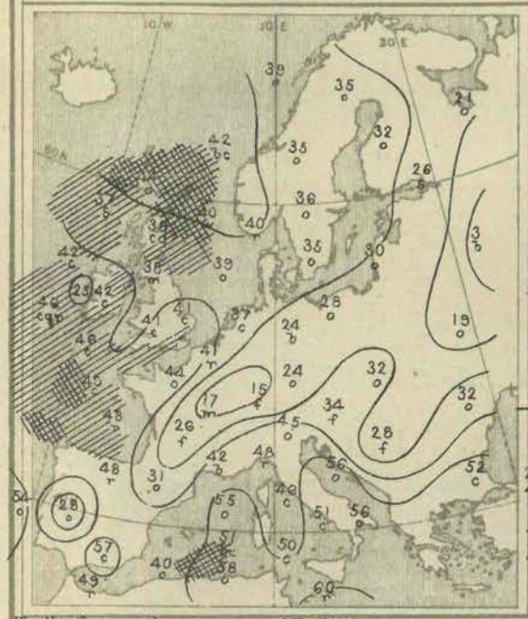
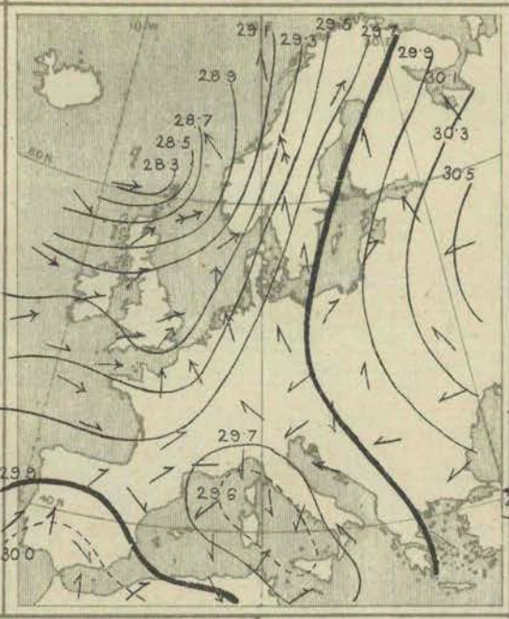
Saturday, 9th December.

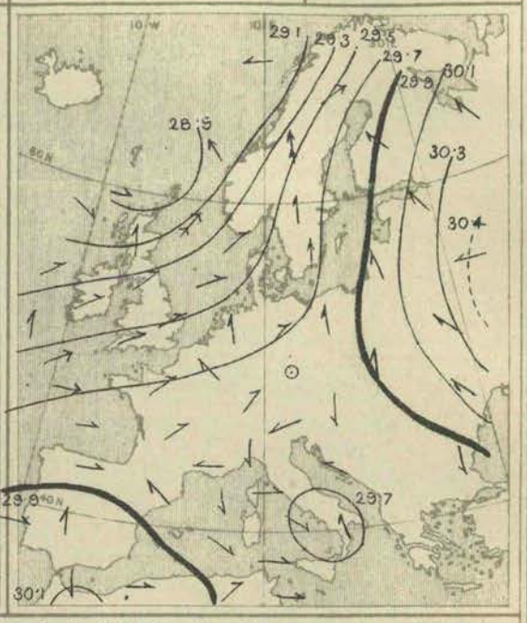
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fine over the greater part of England, but showery in Ireland and Scotland, with snow at Stornoway. Dull at most of the Continental stations, with fog in Austria and south Germany, rain in the south of Norway, the Netherlands, and the south-west of France, and snow at St. Petersburg. Fine and bright over the central parts of Russia and Germany. Showers falling during day in many parts of the United Kingdom, and heavy rain setting in at night on our south-west coasts. Considerable quantities of rain falling also in Portugal and at most of the Adriatic stations.

Temperature fallen in our Islands and also in many parts of central and southern Europe, but risen elsewhere. Morning readings highest, 60° at Malta, 58° at Barcelona, and 56° at Brindisi and Lesina; above 45° in the west of France. Lowest, (1) − 5° Fahr. at Kharkov, + 3° at Moscow, and 19° at Kiev; (2) 15° at Munich, and 17° at Belfort; below the freezing point in nearly all parts of Russia and central Europe. Daily maxima below 45° in all the more northern parts of our Islands, and below 50° at most of our southern stations. Frost occurring over the United Kingdom at night.

Wind light to fresh from the Westward or South-Westward over the greater part of our Islands and the west of France, but North-Westerly in the north of Scotland. Strong to a gale from the Southward or South-Eastward over Scandinavia and Denmark, and light or moderate from the same quarters in Germany and the north of Russia. Variable in Austria, Northerly over the northern and central parts of Italy, but Southerly in the south of that country, and also in Spain and Algeria. Backing to the Southward or South-Eastward on our south-west coasts at night, and increasing to a fresh or strong gale.

Barometer highest, 30·5 ins. and upwards in a large anticyclone lying over Russia; 30·0 ins. and upwards in another system over Algeria and the southern parts of the Spanish Peninsula. Lowest, 28·3 ins. and less in a depression lying to the northward of the Shetlands (gradients steep over Norway and the northern parts of the North Sea); 29·7 ins. and less in a shallow system off the west of Italy. Northern depression subsequently travelling away to the northward, but new disturbance approaching our western coasts in evening.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force is indicated thus: ⇉ = a heavy gale; → = a gale; ⇢ = a fresh to strong breeze; ⟶ = a light to moderate breeze; and ◎ = a calm. In the left-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Germany, Sweden, and Norway, and 7 a.m. in France, Algeria, Italy, Austria, and Russia; that for 6 p.m. is prepared from observations made at 6 p.m. in the British Islands and France, 7 p.m. in Algeria, 8 p.m. in Sweden and Norway, Germany, and Austria, and 9 p.m. in Russia, Belgium, and Italy. The time indicated in each case is the standard time for each country

GENERAL NOTES.

At the commencement of the week, a long anticyclonic band extended eastwards from the Atlantic over the more central parts of Europe, well-marked cyclonic systems being situated respectively over Lapland and the neighbourhood of the Shetlands. The depression to the northward of our Islands subsequently travelled in a south-south-easterly direction across the North Sea to Germany, and the eastern portion of the high-pressure band gave way. In the rear of the disturbance, however, a new anticyclonic system was formed over northern Europe, and, on the 4th and 5th, two high-pressure areas were in existence, one over Finland and the north of Sweden, and the other to the westward of our Islands. On the 6th, both systems moved south-eastwards, the former to central Russia, where it remained until the close of the week, and the latter to France where it quickly dispersed. A series of large depressions now travelled north-eastwards along our own and the Norwegian coasts, and increasing South-Westerly and Southerly winds set in over the whole of north-western Europe, with a severe gale in Scotland and Norway on the 8th. During the greater part of the week shallow depressions were observed over various parts of the Mediterranean, and heavy falls of rain were experienced in Italy and Algeria.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 290.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	2·4	?	5	?	EASTBOURNE	18·2	?	33	?
OSWALDKIRK (Yorkshire)	4·7	?	9	?	TENBY	10·4	?	19	?
WORKSOP	8·8	+ 1·8	17	+ ?	NEWQUAY	14·6	?	26	?
THURCASTON (Leicestershire)	11·3	+ 5·3	21	+ ?	TORQUAY	16·0*	?	29*	?
MARGATE	13·1	?	24	?	ARLEY COTTAGE (County Cavan)	8·2	?	16	?
WESTBOURNE (Sussex)	13·3*	?	24*	?	GUERNSEY	13·4*	?	24*	?
BRIGHTON	17·7	?	32	?					

* The values at Westbourne, Tenby, Torquay and Guernsey are obtained by Jordan's Photographic Recorder.

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WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; R. H. SCOTT, F.R.S., SECRETARY.

By whom Subscriptions, payable in advance, can be received.

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VOL. X. No. 50.] *Third Series.* WEEK ENDING SATURDAY, 16TH DECEMBER, 1893. [*Price 6d.* *Annual Subscription, post paid, £1 10s. 0d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871-90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the twenty-five years 1866-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the ten years 1881-90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

	DISTRICTS. (See p. 296.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 1st, 1893. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	54	25	44·3	34·7	39·7	2 above.	6	− 1	29	− 1	2364*	+500	704*	− 15
	1. SCOTLAND, EAST	55	25	44·1	32·7	38·6	2 above.	6	0	35	− 2	2646	+297	800	+ 21
	2. ENGLAND, N.E.	55	27	46·6	34·7	40·9	3 above.	13	+ 5	31	+ 1	2953	+433	611	− 38
	3. ENGLAND, EAST	58	29	49·1	34·1	41·9	4 above.	20	+11	35	+ 1	3433	+515	730	− 12
	4. MIDLAND COUNTIES	56	27	48·5	33·7	41·4	4 above.	18	+ 8	36	+ 1	3509	+652	740	− 12
	5. ENGLAND, SOUTH	57	27	50·0	37·2	43·9	4 below.	33	+17	13	−14	3765	+565	519	− 35
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	55	27	45·6	35·6	40·8	1 above.	10	− 1	26	+ 1	2916	+473	532	− 17
	7. ENGLAND, N.W.	58	28	48·0	34·7	41·6	2 above.	17	+ 6	32	+ 7	3407	+752	445	− 83
	8. ENGLAND, S.W.	56	26	50·8	37·2	44·3	3 above.	36	+18	13	− 6	3707	+688	350	− 45
	9. IRELAND, NORTH	55	28	45·2	34·8	40·2	0 (average)	9	− 4	29	+ 5	3153	+541	414	− 74
	10. IRELAND, SOUTH	57	28	49·9	36·0	43·2	1 above.	34	+14	17	− 8	3570	+579	306	− 68
	—CHANNEL ISLANDS	58	32	52·5	42·7	47·8	3 above.	41	+11	0	− 6	4306	+825	81	− 56

Rainfall. Bright Sunshine.

	DISTRICTS. (See p. 296.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the mean for the Week.	From Jan. 1st, 1893. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 1st, 1893. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of ins.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	7	22	9 more.	241	+ 6	55·6*	+ 8·1	1	− 4	2	− 10	991	−153	23	− 4
	1. SCOTLAND, EAST	6	7	0 (average)	191	− 2	26·4	− 4·5	6	− 1	13	− 5	1360	+ 29	31	0
	2. ENGLAND, N.E.	4	6	0 (average)	166	−13	20·4	− 5·5	9	+ 1	17	+ 3	1544	+317	36	+ 7
	3. ENGLAND, EAST	5	6	0 (average)	165	−12	20·4	− 5·0	9	− 1	16	− 1	1802	+308	42	+ 7
	4. MIDLAND COUNTIES	5	11	5 more.	156	−18	19·5	− 8·4	9	+ 1	17	+ 2	1699	+565	40	+ 9
	5. ENGLAND, SOUTH	4	11	5 more.	155	−15	22·6	− 4·4	6	− 3	11	− 7	1848	+401	43	+ 9
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	7	16	3 more.	194	− 8	39·5	− 9·3	8	+ 1	16	+ 3	1532	+221	36	+ 5
	7. ENGLAND, N.W.	5	12	4 more.	181	− 8	29·8	− 4·5	7	+ 2	13	+ 4	1492	+197	35	+ 5
	8. ENGLAND, S.W.	5	18	7 more.	164	−33	31·8	− 7·8	13	+ 2	24	+ 5	1941	+374	45	+ 8
	9. IRELAND, NORTH	7	10	2 more.	206	−14	32·0	− 3·1	13	+ 6	26	+ 11	1360	+141	32	+ 4
	10. IRELAND, SOUTH	6	12	3 more.	178	−23	29·9	− 7·3	14	+ 3	27	+ 7	1507	+ 89	35	+ 2
	—CHANNEL ISLANDS	5	13	4 more.	177	−33	27	− 5·6	20	+ 6	35	+ 11	2261	+422	53	+ 10

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather was again very unsettled, squally, and rainy during the greater part of the week, but towards its close some improvement took place, especially in the south and east.

Temperature just equalled the mean in Ireland N., but in all other parts of the United Kingdom it was above it, the excess over southern, central, and eastern England being 4°. The highest of the maxima were registered either on the 15th or 16th, and ranged from 58° in England E., England N.W., and the Channel Islands, to 54° in Scotland N. The lowest of the minima were recorded on the 12th, when they ranged from 25° in Scotland N. and E., to 29° in England E., and to 32° in the Channel Islands.

Rainfall was considerably more than the mean over the country as a whole, but over the eastern and north-eastern parts of Great Britain there was no more than the normal amount.

Bright Sunshine was rather more prevalent generally than it was during the preceding week, and exceeded the mean in all the "grazing" districts, as well as in England N.E. and the Midland Counties. The percentage of the possible duration ranged from 35 in the Channel Islands, and from 27 in Ireland S., to 11 in England S., and to only 2 in Scotland N.

Barometer and Wind.—During nearly the whole of the period depressions moving eastwards and north-eastwards followed each other in quick succession over our Islands and their immediate neighbourhood. Some of these systems were deep and caused very strong winds or gales from between South and West on nearly all parts of our coasts. The gale experienced over the southern districts on Thursday was very severe. Towards the end of the week the barometer had risen decidedly over all our more southern counties, but depressions were still observed off our north-western and northern coasts.

607 1|90 J. & Co., Ltd.
213 70 12|93 1896

* This value has been altered owing to the receipt of further information for a preceding week.

NOTE.—THE REPORT FOR NEXT WEEK WILL NOT BE ISSUED UNTIL FRIDAY OR SATURDAY.

II.—DATA from which the SUMMARY on page 295 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°				Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	49	34	44·9	37·4	41·3	+ 2·2	8	19	7	1·20	+0·25	*	*	*	*
	Stornoway	53	29	44·4	33·9	39·4	+ 0·5	7	32	7	2·06	+0·81	?1·8	−?1·1	?4	−?10
	Wick	54	30	44·1	34·1	39·3	+ 1·7	6	31	5	0·41	−0·29	*	*	*	*
	Lairg Ⓢ	54	25	46·9	32·6	40·0	+ 4·1	14	38	7	1·11	+0·22	*	*	*	*
	Glencarron Ⓢ	53	27	42·1	33·3	37·9	+ 0·4	0	32	7	3·55	+1·41	*	*	*	*
	Fort Augustus Ⓢ	52	31	43·4	34·7	39·2	+ 1·2	4	28	7	2·15	+1·10	0·0	?	0	?
	Fort William Ⓢ	53	32	44·2	36·7	40·6	+ 1·3	6	21	7	4·71	+2·67	0·3	?	1	?
1. SCOTLAND, E.	Nairn	54	28	44·9	32·7	39·0	+ 1·4	8	36	6	0·34	−0·11	*	*	*	*
	Aberdeen	52	22	45·0	34·4	39·9	+ 2·3	8	30	6	0·57	−0·15	6·5	− 1·9	14	− 5
	Braemar Ⓢ	50	25	40·3	31·1	35·9	+ 1·4	0	43	7	1·08	+0·40	1·7†	?†	4†	?†
	Ochtertyre Ⓢ	54	28	44·6	33·9	39·5	+ 3·0	7	32	7	0·64	−0·28	*	*	*	*
	Leith	55	28	46·9	33·4	40·4	+ 1·2	14	35	4	0·53	+0·14	*	*	*	*
	Marchmont Ⓢ	51	26	43·0	30·7	37·1	+ 0·6	3	42	5	0·72	0·00	8·0	?	17	?
2. ENGLAND, N.E.	Alnwick Castle	53	28	45·0	36·3	40·8	+ 2·8	8	23	6	0·53	−0·17	*	*	*	*
	Durham	52	27	45·2	33·3	39·5	+ 2·3	9	34	4	0·63	−0·05	10·1	+ 0·6	21	+ 2
	Shields	55	30	47·1	34·0	40·8	+ 1·9	14	33	3	0·70	+0·11	*	*	*	*
	Scarborough Ⓜ	53	30	47·7	34·9	41·6	+ 2·5	16	31	4	0·77	+0·13	*	*	*	*
	York	54	30	47·7	33·7	41·0	+ 3·2	16	35	4	0·71	+0·20	7·0	+ 1·5	14	+ 3
	Spurn Head	52	34	47·0	36·4	41·9	+ 2·8	14	25	3	0·33	−0·15	*	*	*	*
3. ENGLAND, E.	Hillington Ⓜ	56	29	49·0	33·0	41·3	+ 4·1	20	39	5	0·42	−0·13	8·9	+ 0·8	17	0
	Yarmouth	54	32	47·3	35·4	41·6	+ 3·2	15	29	5	0·48	−0·10	*	*	*	*
	Geldeston	57	30	50·1	34·8	42·8	+ 4·4	36	20	5	0·50	−0·02	8·1	− 2·5	15	− 5
	Cambridge	58	30	50·3	33·4	42·2	+ 4·5	38	24	4	0·30	−0·13	10·1	+ 1·0	19	+ 2
	Rothamsted	55	29	49·0	33·8	41·7	+ 3·8	20	36	4	1·04	+0·49	7·7	?	14	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	53	31	47·6	33·4	40·8	+ 3·1	16	36	4	1·28	+0·77	*	*	*	*
	Loughborough	55	29	48·9	33·1	41·3	+ 3·4	19	38	5	0·68	+0·18	*	*	*	*
	Stamford (Ketton Hall)	56	27	49·1	33·4	41·6	+ 4·0	20	38	5	0·50	−0·04	*	*	*	*
	Cheadle Ⓜ	52	29	46·1	32·5	39·6	+ 2·6	11	38	4	1·51	+0·61	*	*	*	*
	Churchstoke Ⓜ	53	30	47·5	33·1	40·6	+ 2·4	15	37	6	1·65	+0·95	8·0	− 0·2	15	− 1
	Hereford Ⓜ	55	30	49·9	34·3	42·4	+ 3·7	35	22	4	1·52	+0·99	*	*	*	*
	Cirencester	54	27	49·1	33·1	41·4	+ 3·8	20	38	4	1·10	+0·46	8·9	+ 0·2	17	0
	Oxford	56	33	49·7	36·6	43·4	+ 4·8	32	15	4	0·89	+0·41	11·0	+ 2·7	21	+ 5
5. ENGLAND, S.	London	57	30	50·1	36·0	43·3	+ 3·9	34	17	4	0·92	+0·45	4·5†	+ 0·1†	8†	0†
	North Foreland	55	27	49·4	37·0	43·5	+ 3·7	32	14	3	0·79	?	*	*	*	*
	Strathfield Turgiss Ⓜ	54	29	48·7	35·1	42·2	+ 4·1	30	19	6	2·05	+1·57	*	*	*	*
	Dungeness	54	30	49·1	39·1	44·3	+ 3·9	28	8	4	0·37	−0·31	*	*	*	*
	Hastings (St. Leonards)	56	34	50·4	37·9	44·4	+ 4·1	34	11	3	0·51	−0·16	5·5	− 6·5	10	−13
	Southampton	56	31	51·1	35·5	43·6	+ 3·4	30	18	4	1·22	+0·54	6·7	− 3·2	12	− 7
	Hurst Castle	56	35	51·0	40·7	46·1	+ 4·8	34	4	3	0·70	+0·06	*	*	*	*
	Stowell Ⓜ	54	31	50·1	36·3	43·5	+ 4·7	34	16	5	1·84	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	55	32	45·0	36·3	41·0	+ 0·9	8	25	7	2·37	+0·24	*	*	*	*
	Glasgow	52	32	44·3	36·2	40·4	+ 2·1	6	23	6	0·72	−0·18	3·6	+ 0·2	8	+ 1
	Ardrossan	51	33	46·1	37·7	42·1	+ 1·8	19	12	7	0·79	−0·05	*	*	*	*
	Glenlee Ⓢ	53	27	44·8	30·9	38·1	+ 0·7	8	43	7	2·03	+0·61	*	*	*	*
	Douglas (Isle of Man)	52	30	47·7	36·7	42·4	+ 1·1	25	15	7	1·95	+0·93	11·8	+ 1·8	23	+ 4
7. ENGLAND, N.W.	Stonyhurst	50	31	45·5	33·1	39·6	+ 1·5	10	36	5	1·28	+0·23	4·5	− 1·7	9	− 3
	Blackpool Ⓜ	58	30	49·5	34·4	42·2	+ 3·2	33	21	6	1·16	+0·46	8·3	+ 2·5	16	+ 4
	Manchester	53	28	47·1	32·1	39·9	+ 2·0	14	40	5	1·23	+0·43	1·2†	?†	2†	?†
	Liverpool Obsy. (Bidston)	54	32	48·7	36·1	42·7	+ 2·8	30	17	2	0·87	+0·29	*	*	*	*
	Llandudno Ⓜ	54	34	49·2	37·9	43·8	+ 1·9	30	11	5	1·21	+0·47	11·8	+ 5·9	23	+12
	Holyhead												*	*	*	*
8. ENGLAND, S.W.	Llandovery	54	26	50·1	31·9	41·4	+ 0·5	23	44	7	1·67	+0·47	*	*	*	*
	Pembroke	53	33	51·0	40·3	45·9	+ 1·9	34	5	7	2·01	+1·10	12·6	+ 2·2	24	+ 4
	Bristol (Montpelier)	56	35	51·4	38·2	45·1	+ 5·6	38	11	3	1·11	?	*	*	*	*
	Arlington (N. Devon)	54	30	49·3	35·0	42·4	+ 1·8	32	20	3	2·15	+0·84	*	*	*	*
	Cullompton Ⓜ	56	28	51·3	34·9	43·4	+ 3·4	40	20	4	1·75	+0·95	10·0	+ 2·5	18	+ 4
	Falmouth	55	36	50·6	39·7	45·4	+ 1·0	33	6	4	2·53	+1·33	18·1	+ 6·0	32	+10
	Plymouth	55	31	51·4	38·0	45·0	+ 2·5	38	11	4	1·55	+0·67	12·3	+ 0·8	22	+ 1
	Prawle Point	54	35	51·6	39·7	45·9	+ 3·0	37	6	4	1·23	+0·37	*	*	*	*
9. IRELAND, N.	Malin Head	?	?	?	?	?	?	?	?	?7	0·85	?	*	*	*	*
	Londonderry	54	32	43·9	35·4	39·8	+ 0·3	5	25	7	0·77	−0·13	*	*	*	*
	Edenfel (Omagh)	55	29	44·3	33·6	39·2	+ 1·0	6	33	7	0·87	+0·07	*	*	*	*
	Belmullet	53	34	46·9	37·4	42·3	− 1·8	21	13	7	1·59	?	*	*	*	*
	Markree Castle	54	28	45·3	34·0	39·9	+ 0·8	9	32	7	0·95	+0·16	12·8	+ 4·8	25	+ 9
	Brookeborough	54	28	44·4	34.0	39·4	+ 1·8	7	31	7	1·10	+0·18	*	*	*	*
	Armagh	54	29	44·1	34·6	39·5	+ 1·2	6	28	6	0·73	+0·08	14·3	+ 6·2	28	+11
	Donaghadee	54	31	47·6	34·9	41·5	+ 0·3	16	31	7	1·12	+0·47	*	*	*	*
	Edgeworthstown												*	*	*	*
10. IRELAND, S.	Dublin	57	33	48·4	38·2	43·5	+ 2·4	26	11	5	0·86	+0·28	13·2	+ 8·1	37	+16
	Parsonstown	55	?30	48·9	34·3	41·9	+ 2·5	19	34	4	0·86	+0·16	14·2	+ 4·3	27	+ 8
	Kilkenny	56	28	49·9	32·9	41·7	+ 1·2	22	39	6	0·56	−0·14	*	*	*	*
	Waterford	52	28	49·9	33·9	42·2	− 0·2	35	23	5	0·91	−0·04	*	*	*	*
	Roche's Point	54	34	50·6	39·3	45·2	+ 1·5	34	8	7	1·17	−0·05	*	*	*	*
	Valencia	56	32	51·4	35·4	43·7	− 1·5	40	18	6	2·02	+0·68	8·4	− 1·6	16	− 3
	Killarney	55	28	50·1	35·2	43·0	+ 0·3	36	19	6	1·91	?	*	*	*	*
	Foynes	55	34	49·6	39.0	44·5	+ 3·6	30	8	5	1·01	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	55	39	53·4	43·0	48·4	+ 1·6	45	0	4	1·54	+0·64	*	*	*	*
	Jersey	58	32	51·6	42·3	47·1	+ 3·3	36	0	6	0·99	+0·11	19·2	+ 6·7	34	+11

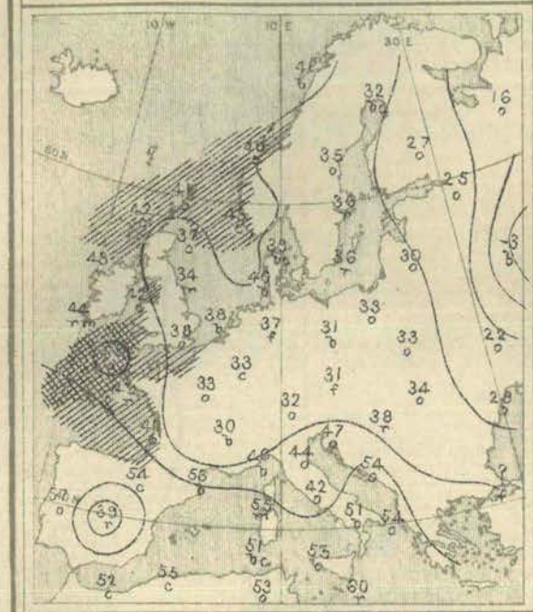
Stations marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row) at the Kew Observatory, and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

Sunday, 10th December.

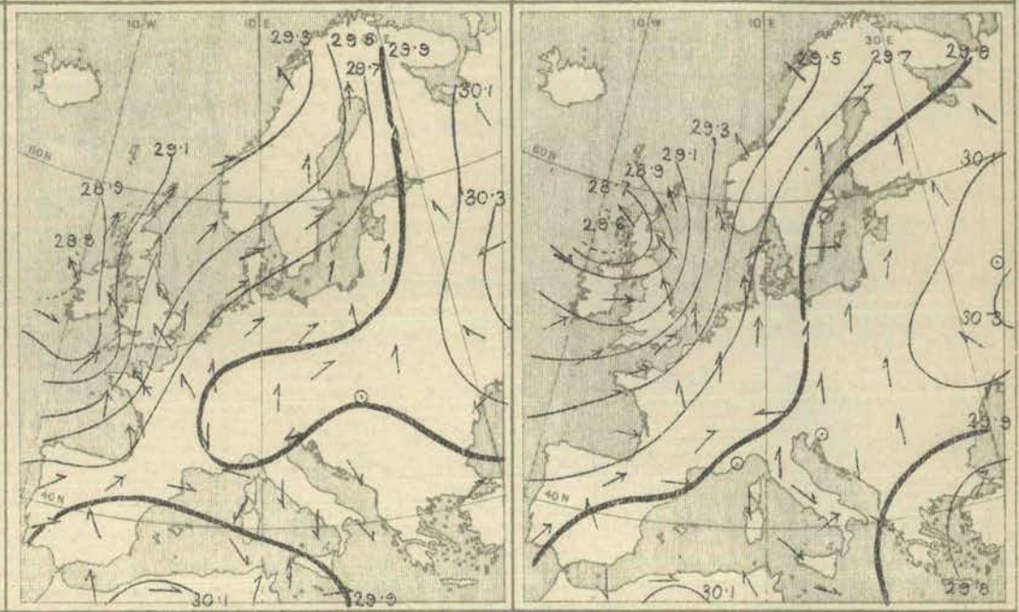
Temperature and Weather. 8 a.m.



Weather in morning fine in the south and east of Scotland and in many parts of Scandinavia, Denmark, Germany, and France. Very unsettled over Ireland, England, and Brittany, with rain at most of the western stations. Considerable rain in the west later (0·95 in. at Pembroke), and smaller quantities over Ireland, Scotland, and the west of France, a heavy fall at Coruna, and wet snow at some of the English stations; sky clearing over many parts of England at night.

Temperature changing considerably and very frequently over the British Islands and their neighbourhood. Morning readings highest, 60° at Malta, and 50° or more over the southern half of the Mediterranean generally, 54° at Biarritz, 51° at Lorient and Scilly; 40° to 45° over Ireland and the western coasts of Scotland and Norway. Lowest, – 10° Fahr. at Kharkov, – 3° at Moscow, + 16° at Archangel, 22° at Kiev, 30° at Cracow, 31° at Prague and Berlin; 32° at Loughborough. Touching 50° or a little more on the southern coasts of England later, and 45° to 48° in most other parts of our Islands—but very unsteady all day. Exceeding 60° in some parts of Algeria and touching 68° at Palermo.

Barometer and Wind. 8 a.m. and 6 p.m.

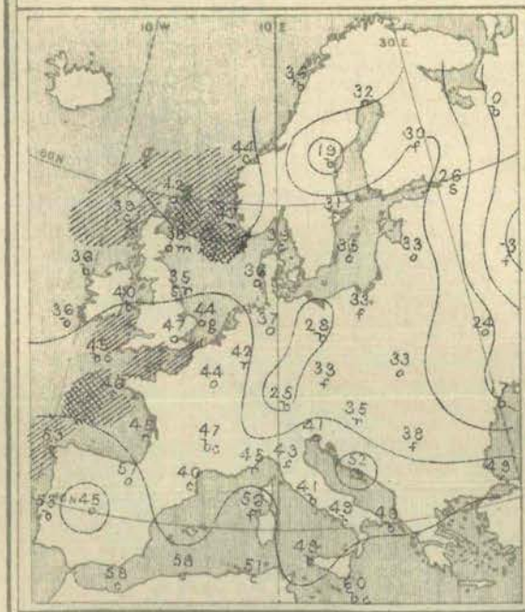


Wind very light in force and variable in direction over eastern, central, and southern Europe, Southerly to South-Easterly over our Islands and France, and blowing a gale at several of our western stations. Strong gales from South-East and South experienced over our western and northern districts later, and fresh to moderate gales elsewhere. Lulling over England as night came on, but blowing hard from South-East in Scotland. Shifting to North-West in Portugal while remaining Southerly in the south-west of France.

Barometer highest, 30·3 ins. and more to 30·6 ins. over Russia; 30·1 ins. and more to 30·6 ins. over Algeria and the south-eastern half of Spain, and exceeding 29·9 ins. over southern Germany, Switzerland, and the south-east of France. Lowest, about 28·8 ins. off the west of Ireland, and 28·9 ins. in a small depression at the mouth of the St. George's Channel; 29·2 ins. and less off the west of Norway. The depression in the south-west moving quickly to the northward later and increasing in depth; barometer falling to 28·4 ins. at Wick at night. Local depression advancing eastwards from the Bay of Biscay to France.

Monday, 11th December.

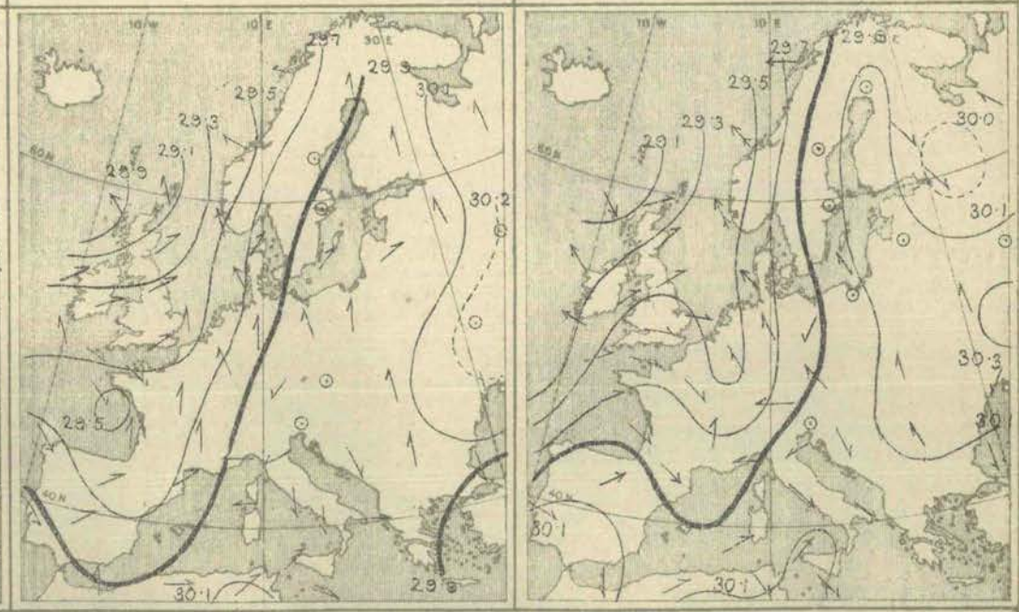
Temperature and Weather. 8 a.m.



Weather in morning fine over the greater part of the United Kingdom, also over Italy and the south of Russia; rain and sleet reported in the north-east of England. Dull in most of the Continental countries, fog at several of the Russian, German, and Austrian stations, rain in the south of Norway, Belgium, and some parts of France, and snow at St. Petersburg. Rain at night over the south-west of our Islands, thunderstorm at Valencia, and lightning at Malin Head. Heavy rain over many parts of France and the Riviera.

Temperature risen in France, Spain, and the eastern parts of our Islands, fallen in most other localities. Morning readings highest 60° at Malta, 58° at Oran and Algiers, 57° at Biarritz, above 45° in the Channel Islands and the south-east of England. Lowest, – 6° Fahr. at Kharkov, – 3° at Moscow, + 10° at Archangel, and 13° at Nicolaieff; below the freezing point at some of the German stations, and very little above it in central Ireland and the north of England. Daily maxima slightly below 40° at some of our own northern and north-western stations; exceeding 60° over Algeria and south of Italy, and touching 73° at Algiers, 68° at Palermo. Frost in many parts of Great Britain at night.

Barometer and Wind. 8 a.m. and 6 p.m.



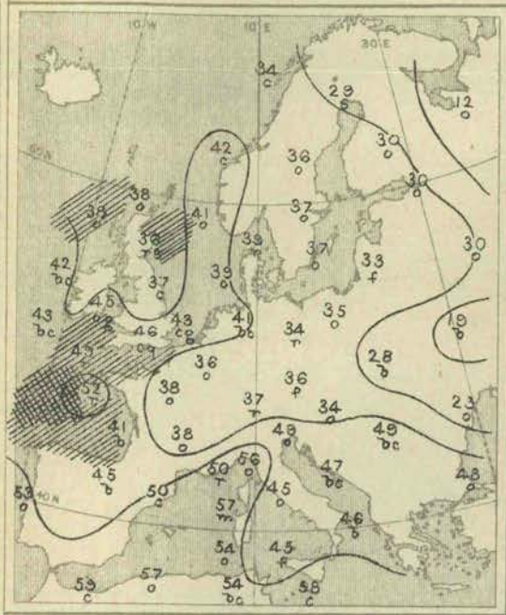
Wind Southerly (South-West to South-East) over the greater part of western and northern Europe; moderate to fresh in force generally, but blowing a gale at Skudesnaes. Light from the Westward in the south-west of England, moderate to strong from the North-Westward in Portugal; variable in Austria and south Germany, Northerly over the greater part of Italy; variable in the south of France; Southerly in Algeria. Subsequently veering to the Westward in the north of Scotland, but backing to the South-Eastward in the west of Ireland, and increasing considerably in force.

Barometer highest, 30·2 ins. and upwards in an anticyclone lying over central Russia; 30·0 ins. and upwards over the whole of Russia, Austria, Italy, and the adjacent parts of the Mediterranean. Lowest, 28·9 ins. and less in a depression off the north-west of Scotland; secondary disturbances reported over various parts of our Islands and the Bay of Biscay. Depression in north subsequently travelling north-eastwards, but new one approaching the south-west of Ireland at night.

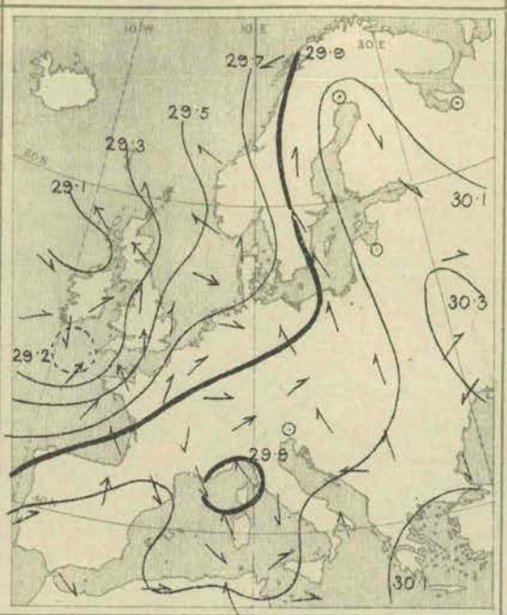
Judd & Co Ltd. Lith. 63, Carter Lane

Tuesday, 12th December.

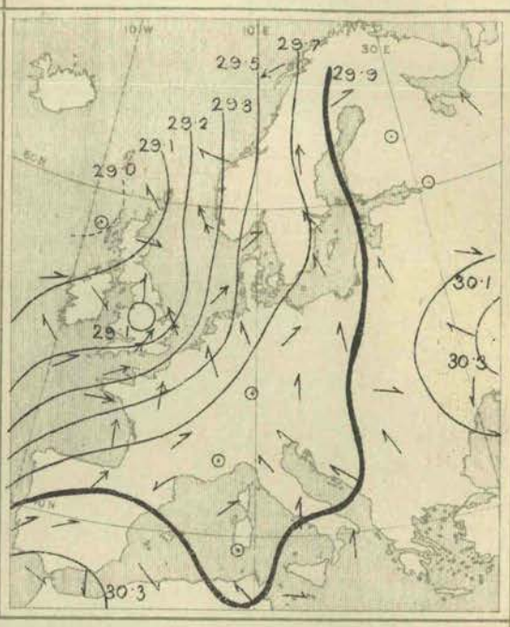
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather cloudy or overcast in most parts of our Islands and the Continent, with rain over the central and south-western parts of England, as well as at some of the French, German, and Danish stations, sleet reported at Aberdeen; fine and bright in many parts of Ireland and also in the south-west of France. Heavy rain later in many parts of England, Ireland, and the north-west and north of France, the largest amounts being 1·5 ins. at St. Matthieu, and 1·8 ins. at Brest. Some fall in the north of Italy.

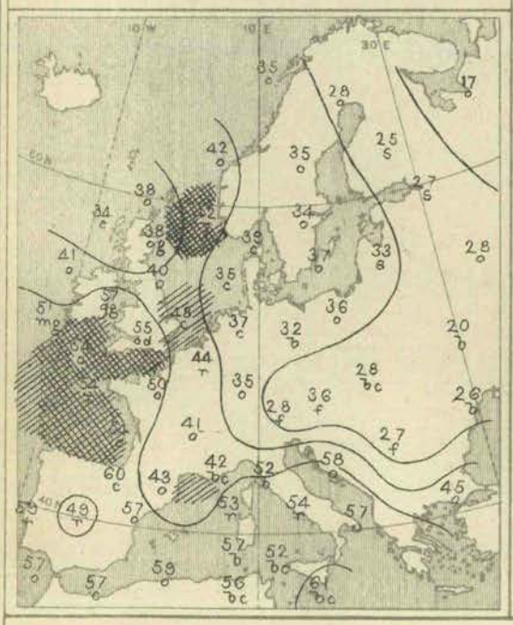
Temperature risen over Ireland, England, Germany, and Sweden, changed irregularly elsewhere. Morning readings highest, 59° at Oran, 58° at Malta, and above 50° at most of the Mediterranean stations, and very little below it on the south and south-west coasts of England. Lowest, 8° at Kharkov, 12° at Archangel, 19° at Kiev, and 21° at Nicolaieff; below 40° over the northern parts of the United Kingdom. Rising during day to a little above 50° at some of our southern stations, to 55° or more in the west and south of France, and to 60° and more over Algeria and some parts of Italy. Frost occurring over Scotland at night.

Wind Southerly over England, the Netherlands, and the greater part of France, and blowing a moderate gale at the Channel stations; South-Easterly over Scotland, Scandinavia, and the Baltic, light from the Westward in the west of Ireland. Light from the South-Eastward over Austria, variable in Italy, the south of France, and Algeria. Subsequently increasing to a "whole gale" or "storm" over the Channel and south-east of England; backing to the South-Eastward in the south of Ireland at night, and increasing to a gale in that region.

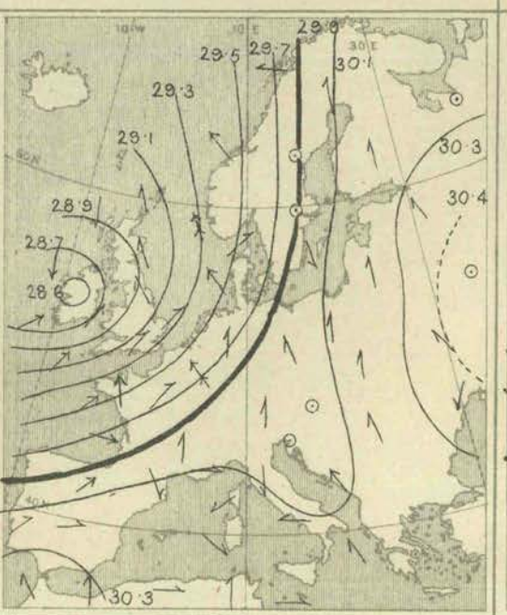
Barometer highest, 30·4 ins. and upwards in an anticyclone over the south of Russia. Lowest, 29·1 ins. and less in a somewhat shallow depression off the west of Scotland; 29·2 ins. and less in a smaller but well-marked disturbance near the mouth of the Bristol Channel. Depression in north-west subsequently moving northwards, but that in the south-west advancing east-north-eastwards across the south of England. A new disturbance approaching the south-west of Ireland at night.

Wednesday, 13th December.

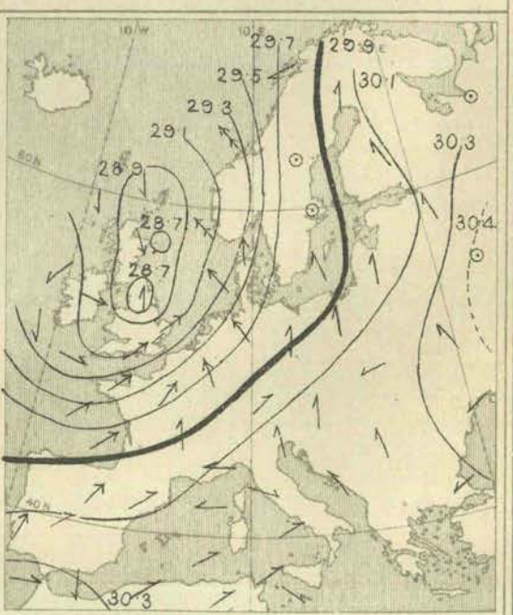
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine and bright over the south of Russia, very foggy over Austria-Hungary, fair over the Mediterranean, but very changeable and unsettled over north-western Europe and the British Islands, with rain in many places. Rain falling later all over the British Isles and the greater part of France and Germany—heavily at some of the French stations, and considerable in several parts of our Islands, snow in the north of Russia; remaining dry over central, eastern, and south-eastern Europe.

Temperature changing frequently over the United Kingdom—higher than on the previous day. Morning readings highest, 61° at Malta, and exceeding 50° on the more southern of the Mediterranean coasts, as well as on the Atlantic shores of Europe and the British Islands generally. Lowest, (1) 3° at Kharkov, and 15° to 17° at the other south Russian stations; 17° at Archangel, and below the freezing point over Russia generally; (2) 33° to 39° at the Scotch stations. Falling decidedly over Ireland later, and fall spreading eastwards.

Wind light and anticyclonic over eastern, south-eastern, and southern Europe; cyclonic in the North-West, and blowing a gale in many parts of the British Islands—South-Westerly to Southerly over England, South-Easterly in the east of Scotland and north of Ireland, Northerly at Belmullet. Shifting to North and North-West on our western coasts during day, and subsiding; blowing very strongly from South-West over England all day, and becoming strong to a gale from South-East on the eastern shores of the North Sea.

Barometer highest, (1) 30·5 ins. and more over the south-east of Russia, and exceeding 30·0 ins. over that country generally; (2) 30·3 ins. and more to 30·6 ins. over the north of Africa and Spain. Lowest, 28·6 ins. and less in a depression over Ireland, and below 28·9 ins. in a secondary over the north of England. Main depression moving north-eastwards later; a "V" shaped secondary being developed over the United Kingdom and moving eastwards.

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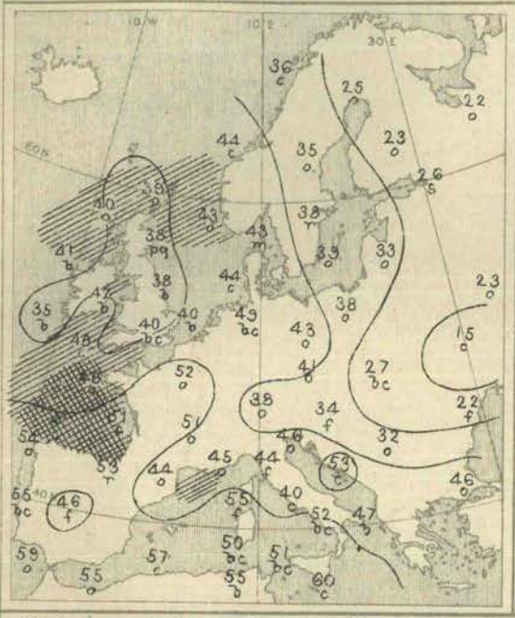
Thursday, 14th December.

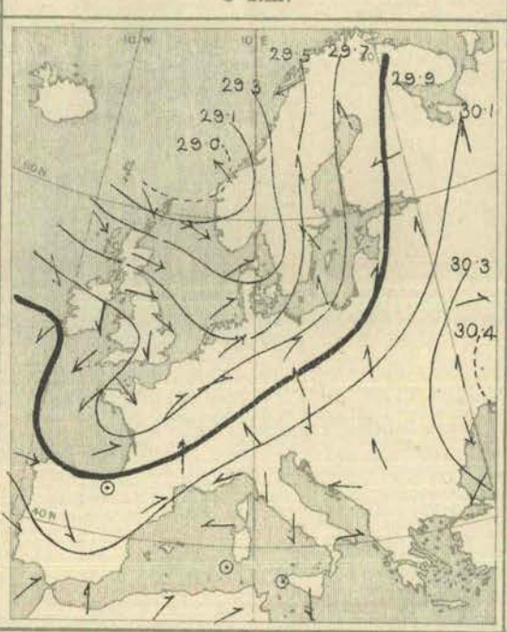
Temperature and Weather.

8 a.m.

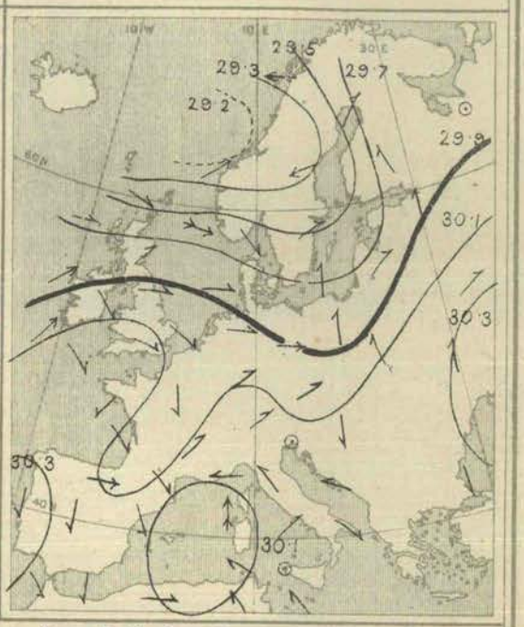


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning fine over the western and most of the northern parts of the United Kingdom and the south of Russia, fair, as a whole, over southern Europe generally, foggy over Austria, dull over Germany; rain falling at Breslau and Helsingfors, snow at St. Petersburg and also at Wick. Rain general at the Irish, Scotch, and Scandinavian stations later—fall considerable in several places; local showers over France and Germany.

Temperature fallen fast over England, Ireland, and the north of France, risen fast over central Europe. Morning readings highest, 60° at Malta, and exceeding 50° at most Mediterranean stations, as well as on the coasts of Portugal and the north of Spain, 52° at Paris, 48° at Scilly. Lowest, (1) 5° at Kharkov, 15° at Kiev, 20° at Odessa, 23° at Moscow and Kuopio, 25° at Haparanda, 33° at Warsaw and Buda-Pesth; (2) 30° at Parsonstown, 34° at York, and 39° at Oxford. Rising to 50° and more on our south-west coasts during the following night, but sharp frost prevailing over the midland and south-eastern counties of England.

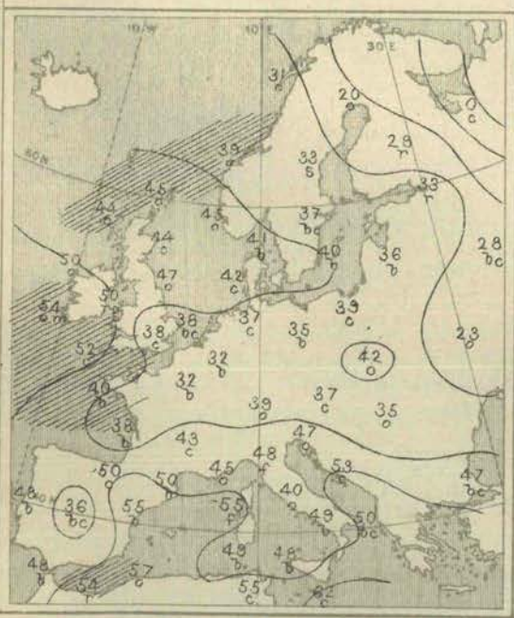
Wind (1) Westerly to Southerly over France, Southerly over Germany (a gale at Neufahrwasser), South-Easterly to Easterly over Sweden and the greater part of Norway; (2) North-Westerly over Ireland, Scotland, the Shetlands, and south-west of Norway. Northerly over England and the greater part of the Channel, as well as at Brest and Jersey. The Northerly breeze dying out later, and freshening South-Westerly breezes again setting in at the Irish stations.

Barometer highest, (1) 30·5 ins. and more to 30·0 ins. over Russia and south-eastern Europe, and exceeding 30·0 ins. over the whole of the Adriatic, the Mediterranean, and the greater part of the Spanish Peninsula; (2) 29·9 ins. and more over the south-west of Ireland. Lowest, 28·9 ins. and less in a depression lying off the west of Norway, 29·3 ins. and less over Denmark, 29·6 ins. and less over the Straits of Dover, and below 29·7 ins. over Brittany. Rising rapidly over Great Britain, France, and the North Sea later, but falling fitfully over Ireland and Scotland towards night.

Friday, 15th December.

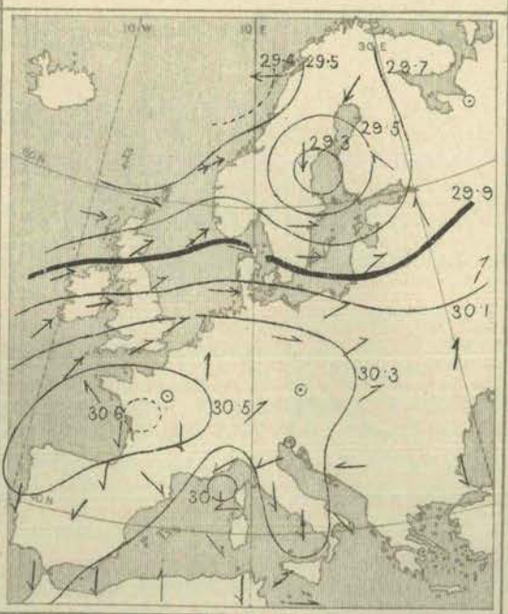
Temperature and Weather.

8 a.m.

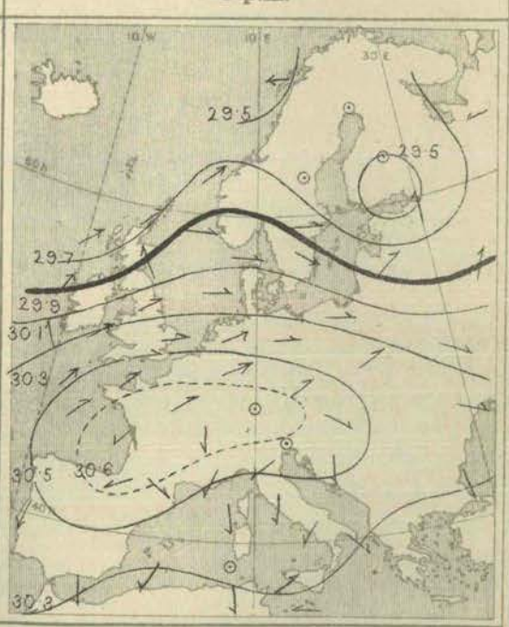


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning fine and bright over the greater part of the English Channel, France, and Spain, and the south-eastern parts of the Mediterranean, and fair, as a whole, over south-eastern Europe; very unsettled in the far north, but moderately fair over the United Kingdom. Some rain over the northern parts of the British Isles later (heavy at Stornoway), some snow showers over Russia, and a considerable fall of rain at Laghouat (Algeria).

Temperature risen fast over the British Isles, fallen fast over France. Morning readings highest, 50° or more on the southern shores of the Mediterranean, and 50° to 54° on the western coasts of the British Isles. Lowest, (1) 0° Fahr. at Archangel, 20° to 28° over Finland; (2) 16° at Kharkov, 23° at Kiev; (3) 32° at Münster, Brussels, Paris, and Le Mans, 38° in London and at Cambridge. Rising later to 68° at Palermo and Sfax, 60° and more over Italy and some of the southern parts of France, and to between 50° and 56° in many parts of our Islands

Wind mainly Northerly to North-Easterly over southern Europe; very light and variable over the central parts, chiefly South-Westerly to Westerly over the north-western and northern countries, and strong to a gale in force; North-Easterly, however, at Haparanda, and Northerly (a moderate gale) at Hernösand. Decreasing greatly in force in the North and North-West later, and "backing" a little in Ireland; gales in North all subsiding.

Barometer highest, (1) 30·6 ins. and more to 30·3 ins. in an anticyclone covering Spain, the Bay of Biscay, France, Germany, and Austria; (2) 30·4 ins. and more to 30·3 ins. in another over the south of Russia. Lowest, 29·5 ins. and less to 29·6 ins. in a large area lying away to the northward of the United Kingdom, and below 29·3 ins. in a small but deep depression over the Gulf of Bothnia. New disturbances reaching our north-west coasts later, that in the north filling up considerably.

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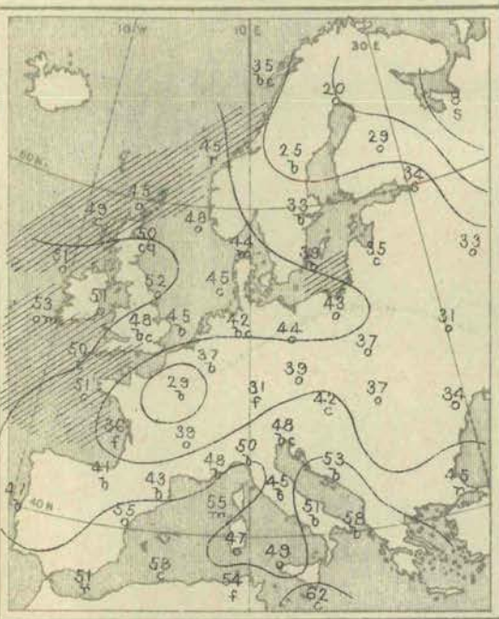
Saturday, 16th December.

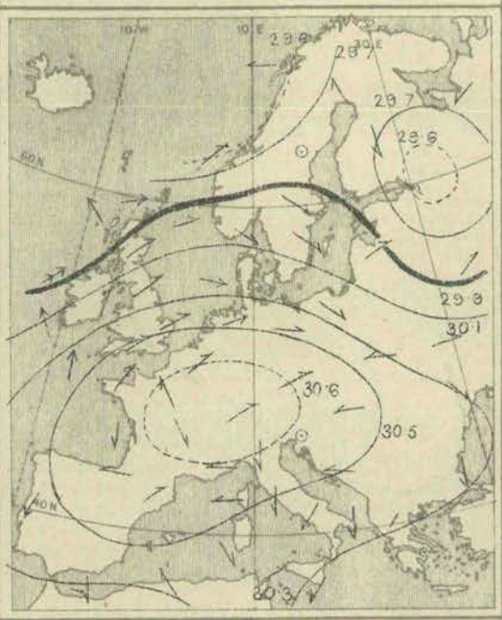
Temperature and Weather.

8 a.m.

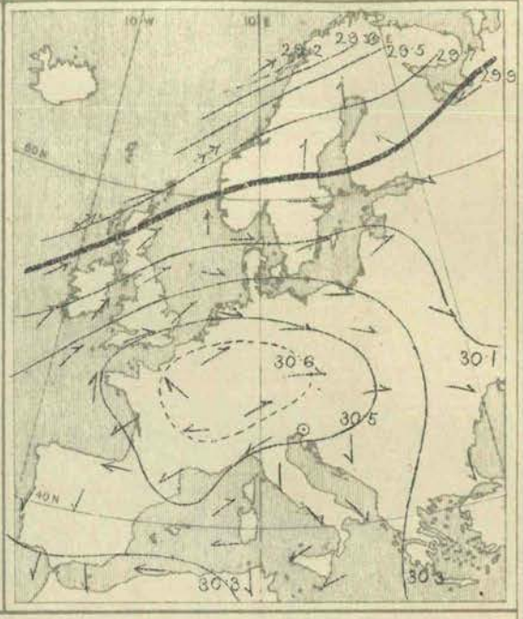


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning fine over Spain, France, and the south and east of England, but hazy or foggy in places; dull and unsettled over Ireland, Scotland, northern and central Europe, with rain at Christiansund and Breslau, snow over the Gulf of Finland and Odessa. Heavy rain at Stornoway and Bodö later, and smaller quantities at the other western and northern stations; considerable falls in Algeria also.

Temperature risen again over our Islands, fallen over France and central Europe. Morning readings, highest, 62° at Malta, 59° at Algiers, exceeding 50° at most stations on our western and the Scotch coasts, and exceeding 40° in many parts of Germany and Austria. Lowest, (1) 8° at Archangel, 20° at Haparanda, 23° at Kuopio; (2) 26° at Kharkov, 21° at Kiev and Odessa; (3) 29° at Paris, 30° at Le Mans, 31° at Wiesbaden and Munich. Exceeding 60° later in many parts of Algeria, Italy, and the extreme south of France, but tending to fall a little over Scotland and Ireland.

Wind Easterly to North-Easterly, and moderate over the Mediterranean and southern Europe; Southerly to Westerly and North-Westerly in the north-west and north, and blowing freshly in the western parts of the British Isles, nearly calm over central France and western Germany. Rising to a gale from South-West on the north-west coast of Norway and in the Minch later, very little change elsewhere.

Barometer highest, 30·7 ins. and more to 30·3 ins. in a large anticyclone covering France, Spain, the Mediterranean, Germany, and the southern parts of our Islands and the North Sea. Lowest, 29·6 ins. and less in a depression over the north of Russia, and in another off the north-west of Norway, and apparently below 29·8 ins. later to the westward of Scotland. Falling briskly in the north-west and north of Scotland, and rapidly in the north-west of Norway.

Explanation of Charts.—In the two right-hand Charts the height of the barometer is expressed by isobars, the pressure corresponding to each line being given in inches and tenths. The prevalent winds are shown by arrows, which are drawn flying *with the wind*, the force is indicated thus: ⟫⟶ = a heavy gale; ⟶ = a gale; ⟶ = a fresh to strong breeze; ⟶ = a light to moderate breeze: and ⊙ = a calm. In the left-hand Chart the weather is indicated as follows:—b = blue sky; c = detached clouds; o = overcast; m = misty (hazy); f = foggy; q = squally; r = rain; h = hail; s = snow; l = lightning; and t = thunder. The general distribution of temperature is shown by isotherms, and the readings at selected stations are given in degrees Fahrenheit. Diagonal lines = rough sea, the shading being proportional to the disturbance.

N.B.—The Charts for 8 a.m. are prepared from observations made at 8 a.m. in the British Islands, Germany, Sweden, and Norway, and 7 a.m. in France, Algeria, Italy, Austria, and Russia; that for 6 p.m. is prepared from observations made at 6 p.m. in the British Islands and France, 7 p.m. in Algeria, 8 p.m. in Sweden and Norway, Germany, and Austria, and 9 p.m. in Russia, Belgium, and Italy. The time indicated in each case is the standard time for each country.

GENERAL NOTES.

The weather prevailing over Europe during this week was very varied in character. (1) Over the north-western countries there was a constant succession of depressions advancing from the Atlantic—some of them travelling over the more northern parts of the region, others travelling over France and the Netherlands. These caused a series of South-Easterly to South-Westerly and at times Westerly gales, heavy falls of rain and great alternations of temperature—in continuation of those observed during the previous week—and lasting almost continuously until Thursday. An alteration then ensued; an anticyclone spread over France and the south of our Islands from the Atlantic, the wind moderated, except in the far north, the weather cleared up, and the barometer rose to 30·6 ins. and more at the more central and eastern of the French stations.

Over eastern Europe the conditions were fair and quiet throughout, but over the southern region (the Riviera, the north of Italy), and even over Algeria, there were occasional falls of rain, caused by small disturbances of no great intensity.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 296.

Stations.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	Stations.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	8·5	?	18	?	EASTBOURNE	6·9	?	11	?
OSWALDKIRK (Yorkshire)	8·6	?	17	?	TENBY	12·4*	?	23*	?
WORKSOP	8·4	+ 1·4	16	+ 2	NEWQUAY	?13·0	?	?23	?
THURCASTON (Leicestershire)	7·9	+ 2·7	15	+ 4	TORQUAY	13·2*	?	24	?
MARGATE	3·2	?	6	?	ARLEY COTTAGE (County Cavan)	12·3	?	24	?
WESTBOURNE (Sussex)	8·0	?	15	?	GUERNSEY	19·8*	?	35*	?
BRIGHTON	6·4	?	12	?					

* The values at Westbourne, Tenby, Torquay and Guernsey are obtained by Jordan's Photographic Recorder.

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WEEKLY WEATHER REPORT.

ISSUED BY THE METEOROLOGICAL OFFICE, 63, VICTORIA STREET, LONDON, S.W.; R. H. SCOTT, F.R.S., SECRETARY.

By whom Subscriptions, payable in advance, can be received.

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VOL. X. No. 51.] *Third Series.* WEEK ENDING SATURDAY, 23RD DECEMBER, 1893. [*Price 6d.* *Annual Subscription post paid*, £1 10*s.* 0*d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871-90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the twenty-five years 1866-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the ten years 1881-90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

	DISTRICTS. (See p. 302.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 1st, 1893. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	51	28	45·3	36·8	41·2	3 above.	9	+ 4	22	− 10	2373	+502	725*	− 27
	1. SCOTLAND, EAST	54	29	44·8	35·5	40·3	4 above.	8	+ 3	26	− 13	2654	+298	826	+ 8
	2. ENGLAND, N.E.	51	32	5·0	36·3	40·8	3 above	8	+ 2	23	− 11	2961	+435	634	− 49
	3. ENGLAND, EAST	51	32	46·0	34·7	40·6	3 above.	11	+ 4	30	− 10	3444	+518	760	− 22
	4. MIDLAND COUNTIES	52	31	46·5	35·9	41·4	4 above.	13	+ 5	26	− 14	3522	+655	766	− 24
	5. ENGLAND, SOUTH	52	29	47·6	36·6	42·4	3 above.	25	+13	15	− 15	3790	+577	534	− 41
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	59	33	47·8	29·5	43·8	5 above.	23	+14	7	− 20	2939	+485	539	− 37
	7. ENGLAND, N.W.	53	34	47·3	39·3	43·4	4 above.	21	+12	8	− 21	3429*	+764	453	− 104
	8. ENGLAND, S.W.	53	31	49·3	40·1	44·9	4 above.	28	+13	5	− 16	3735	+700	355	− 59
	9. IRELAND, NORTH	51	31	46·1	37·0	41·8	3 above.	11	0	22	− 4	3163*	+538	436	− 76
	10. IRELAND, SOUTH	54	33	49·1	39·0	44·2	3 above.	28	+10	8	− 13	3598	+588	314	− 81
	—CHANNEL ISLANDS	53	36	50·7	42·1	46·6	2 above.	32	+ 7	0	− 7	4338	+832	81	− 62

Rainfall.

Bright Sunshine.

	DISTRICTS. (See p. 302.)	Rainfall. For the Week. Number of Rainy Days.	Total Fall.	More or less than the mean for the Week.	From Jan. 1st, 1893. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.	Bright Sunshine. For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 1st, 1893. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
			10ths of in.	10ths of ins.			Ins.	Ins.								
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	6	19	6 more.	247	+ 7	57·5	+ 8·7	1	− 2	3	− 6	992	−156	23	− 4
	1. SCOTLAND, EAST	4	4	2 less.	195	− 1	26·8	− 4·7	7	0	15	0	1367	+ 31	31	0
	2. ENGLAND, N.E.	4	4	2 less.	170	−13	20·8	− 5·7	6	− 2	12	− 4	1551*	+315	36	+ 8
	3. ENGLAND, EAST	4	6	1 more.	169	−12	21·0	− 4·9	14	+ 5	27	+ 10	1816	+313	42	+ 7
	4. MIDLAND COUNTIES	5	10	4 more.	161	−16	20·5	− 8·0	8	0	16	0	1707	+366	39	+ 8
	5. ENGLAND, SOUTH	5	9	3 more.	160	−13	23·5	− 4·1	11	+ 2	21	+ 3	1859	+404	43	+ 10
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	6	18	5 more.	200	− 6	41·3	− 8·8	7	0	14	0	1539	+222	35	+ 5
	7. ENGLAND, N.W.	6	12	4 more.	187	− 6	31·0	− 4·0	5	− 1	10	− 1	1497	+196	35	+ 4
	8. ENGLAND, S.W.	6	17	7 more.	170	−31	33·5	− 7·1	9	− 3	17	− 4	1950	+374	45	+ 9
	9. IRELAND, NORTH	7	11	4 more.	213	−12	33·1	− 2·8	15	+ 7	29	+ 14	1375	+150	32	+ 4
	10. IRELAND, SOUTH	7	19	10 more.	185	−21	31·8	− 6·3	17	+ 6	33	+ 13	1524	+ 96	35	+ 2
	—CHANNEL ISLANDS	6	14	5 more.	183	−32	28·6	− 5·1	10	+ 1	17	+ 2	2271	+421	52	+ 9

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather during this period was again very mild and unsettled. Rain fell frequently in all parts of the Kingdom, especially in the west and north, and the atmosphere was humid.

Temperature continued much above the mean, the excess ranging from 2° in the Channel Islands, to as much as 5° in Scotland W. The highest of the maxima were experienced on somewhat irregular dates, and ranged from 51° in some of the more northern and eastern districts, to 54° in Scotland E. and Ireland S., and to 59° in Scotland W. The lowest of the minima were recorded during the middle part of the week, when they ranged from 28° in Scotland N. and 29° in Scotland W. and England S., to 34° in England N.W., and to 36° in the Channel Islands.

Rainfall was rather less than the mean in Scotland E. and England N.E., but more in all other districts; at most of the western and north-western stations the excess was considerable.

Bright Sunshine exceeded the mean value at some of the eastern and southern stations and over Ireland, but was about the normal elsewhere. The percentage of the possible duration ranged from 33 in Ireland S., 29 in Ireland N., and 27 in England S., to 10 in England N.W., and to only 3 in Scotland N.

Barometer and Wind.—The distribution of pressure was, as a whole, similar to that experienced during the weeks immediately preceding. A series of large depressions travelled north-eastwards outside of, or over, our north-western and northern coasts, causing strong winds or gales from between South and West; in addition to these, a very deep system passed across southern England during the earlier half of the week, causing very severe Southerly to South-Westerly gales all over our south-western and southern counties.

607 1|90 J. & Co., Ltd.
213 70 12|93 1896

* This value has been altered owing to the receipt of further information for a preceding week.

II.—DATA from which the SUMMARY on page 301 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°				Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head ℒ	46	34	44·6	39·1	42·9	+ 3·0	7	8	6	1·26	+0·31	*	*	*	*
	Stornoway	50	32	45·6	37·3	41·6	+ 2·9	10	20	7	1·29	+0·02	3·6	− 2·4	8	− 6
	Wick	47	32	43·6	36·6	40·2	+ 2·8	4	21	5	0·63	−0·07	*	*	*	*
	Lairg ℒ	46	28	43·6	34·6	39·3	+ 3·7	4	28	6	1·09	+0·21	*	*	*	*
	Glencarron ℒ	51	32	46·1	34·2	40·4	+ 3·2	11	32	6	3·60	+1·43	*	*	*	*
	Fort Augustus ℒ	50	33	46·3	37·1	41·9	+ 4·0	12	22	6	1·97	+0·92	0·3	?	1	?
	Fort William ℒ	50	34	47·0	38·4	42·9	+ 3·7	21	10	7	3·66	+1·58	0·4	?	1	?
1. SCOTLAND, E.	Nairn	54	32	47·1	36·0	41·8	+ 4·4	14	26	5	0·39	−0·05	*	*	*	*
	Aberdeen	46	29	44·1	36·6	40·5	+ 3·4	6	21	4	0·44	−0·28	9·2	+ 0·4	20	+ 1
	Braemar ℒ	45	30	41·8	34·2	38·2	+ 4·0	0	27	6	0·77	+0·12	5·0†	?†	11†	?†
	Ochtertyre ℒ	48	31	44·6	35·3	40·1	+ 4·1	7	26	6	0·79	−0·16	*	*	*	*
	Leith	50	32	46·9	37·0	42·2	+ 3·4	22	14	3	0·07	−0·35	*	*	*	*
	Marchmont ℒ	48	30	44·0	33·7	39·1	+ 2·9	6	32	2	0·15	−0·55	5·8	?	12	?
2. ENGLAND, N.E.	Alnwick Castle	48	33	44·6	36·1	40·5	+ 3·0	7	24	3	0·18	−0·52	*	*	*	*
	Durham	50	34	45·4	35·7	40·7	+ 3·3	10	25	4	0·15	−0·50	7·9	− 1·4	16	− 3
	Shields	51	32	46·3	36·3	41·5	+ 3·2	12	24	3	0·12	−0·46	*	*	*	*
	Scarborough ℳ												*	*	*	*
	York	48	33	41·9	37·1	41·2	+ 4·0	8	21	5	0·75	+0·25	3·5	− 2·3	7	− 4
	Spurn Head	46	35	43·7	36·4	40·2	+ 1·4	5	22	3	0·73	+0·25	*	*	*	*
3. ENGLAND, E.	Hillington ℳ	49	33	45·2	34·6	40·1	+ 3·2	9	30	3	0·53	0·00	13·7	+ 5·4	27	+10
	Yarmouth	48	33	44·7	24·9	40·0	+ 2·4	8	28	4	0·53	−0·07	*	*	*	*
	Geldeston	49	33	46·2	35·2	40·9	+ 3·0	12	28	4	0·62	+0·14	18·5	+ 7·8	35	+15
	Cambridge	51	32	47·3	34·0	40·9	+ 3·7	15	33	4	0·39	−0·01	11·0	+ 2·0	21	+ 4
	Rothamsted	50	32	46·7	34·7	40·9	+ 3·7	13	30	5	0·91	+0·33	12·3	?	23	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	49	32	44·4	35·4	40·1	+ 2·9	7	26	6	0·88	+0·36	*	*	*	*
	Loughborough	51	32	47·0	36·3	41·9	+ 4·4	14	25	3	0·97	+0·45	*	*	*	*
	Stamford (Ketton Hall)	51	33	46·7	35·1	41·1	+ 4·1	13	29	4	0·53	+0·01	*	*	*	*
	Cheadle ℳ	49	32	45·2	34·3	39·5	+ 3·1	9	27	6	1·17	+0·46	*	*	*	*
	Churchstoke ℳ	51	32	46·5	37·1	42·0	+ 4·5	13	14	6	1·77	+1·09	7·5	− 0·9	15	− 1
	Hereford ℳ	52	34	47·9	37·0	42·7	+ 4·5	26	14	4	1·41	+0·89	*	*	*	*
	Cirencester	51	31	47·4	34·7	41·3	+ 4·1	15	31	6	0·84	+0·19	9·7	+ 1·0	18	+ 1
	Oxford	52	34	47·1	36·9	42·2	+ 4·0	23	14	5	0·52	+0·05	12·3	+ 4·0	23	+ 7
5. ENGLAND, S.	London	51	33	47·4	35·7	41·8	+ 2·8	15	28	5	0·78	+0·28	8·3†	+ 3·9†	16†	+8†
	North Foreland	49	29	45·9	34·6	40·5	+ 1·1	11	30	4	0·59	?	*	*	*	*
	Strathfield Turgiss ℳ	50	31	45·9	33·7	40·0	+ 2·4	11	33	6	1·04	+0·55	*	*	*	*
	Dungeness	51	34	48·3	38·1	43·4	+ 3·5	26	11	4	0·47	−0·22	*	*	*	*
	Hastings (St. Leonards)	50	33	48·4	36·8	42·8	+ 3·0	27	15	3	0·74	+0·07	12·1	− 0·6	22	− 1
	Southampton	51	35	47·6	37·1	42·6	+ 2·7	25	14	5	1·21	+0·49	11·4	+ 0·7	21	+ 2
	Hurst Castle	52	33	49·1	39·7	44·6	+ 3·8	28	6	5	0·97	+0·33	*	*	*	*
	Stowell ℳ	51	34	48·3	37·4	43·1	+ 4·7	27	13	5	1·36	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	54	35	49·4	39·4	44·6	+ 4·7	29	7	7	2·86	+0·76	*	*	*	*
	Glasgow	50	33	46·0	38·4	42·4	+ 4·3	18	10	6	0·88	−0·02	3·9	+ 0·4	8	+ 1
	Ardrossan	50	35	46·7	40·9	43·9	+ 3·8	18	3	6	0·79	−0·08	*	*	*	*
	Glenlee ℒ	50	34	46·9	37·7	42·5	+ 5·3	22	12	7	3·18	+1·77	*	*	*	*
	Douglas (Isle of Man)	59	38	50·0	41·0	45·7	+ 4·8	30	3	6	1·08	+0·07	9·9	+ 0·4	20	+ 1
7. ENGLAND, N.W.	Stonyhurst	48	34	45·3	37·8	41·7	+ 4·2	9	18	6	1·22	+0·22	3·8	− 2·4	8	− 4
	Blackpool ℳ	53	35	47·5	38·8	43·3	+ 4·5	23	9	6	1·00	+0·28	8·3	+ 2·5	17	+ 5
	Manchester	48	34	46·3	37·3	42·0	+ 4·7	12	13	6	1·13	+0·33	1·5†	?†	3†	?†
	Liverpool Obsy. (Bidston)	52	34	47·6	39·3	43·6	+ 4·0	23	8	5	1·19	+0·61	*	*	*	*
	Llandudno ℳ	52	37	48·5	40·6	44·7	+ 3·1	25	4	4	1·21	+0·52	6·6	+ 0·9	13	+ 2
	Holyhead	50	38	48·3	42·1	45·3	+ 2·7	23	0	6	1·17	+0·32	*	*	*	*
8. ENGLAND, S.W.	Llandovery	51	31	48·3	36·7	42·7	+ 2·1	27	15	6	2·37	+1·15	*	*	*	*
	Pembroke	51	39	50·1	43·9	47·1	+ 3·5	36	0	7	1·45	+0·55	7·3	− 3·1	14	− 6
	Bristol (Montpelier)	52	38	49·0	40·3	44·8	+ 5·5	27	5	5	0·99	?	*	*	*	*
	Arlington (N. Devon)	50	35	48·0	38·1	43·3	+ 3·1	25	11	6	2·15	+0·90	*	*	*	*
	Cullompton ℳ	53	33	49·3	37·6	43·7	+ 4·4	30	12	6	1·49	+0·71	6·3	− 1·7	12	− 2
	Falmouth	53	39	50·3	42·4	46·5	+ 2·6	32	0	6	2·40	+1·20	11·8	− 0·6	21	− 1
	Plymouth	52	35	50·0	40·2	45·3	+ 3·4	31	5	6	2·00	+1·10	7·0	− 4·5	13	− 8
	Prawle Point	51	37	49·4	41·6	45·7	+ 3·4	28	1	5	0·83	−0·01	*	*	*	*
9. IRELAND, N.	Malin Head	49	37	46·0	39·7	43·0	+ 3·5	17	6	7	0·64	?	*	*	*	*
	Londonderry	50	31	46·8	36·5	41·9	+ 2·5	13	24	7	1·21	+0·32	*	*	*	*
	Edenfel (Omagh)	50	31	45·3	36·4	41·0	+ 3·1	9	23	7	1·25	+0·45	*	*	*	*
	Belmullet	50	37	48·6	40·3	44·6	+ 1·0	25	5	7	1·87	?	*	*	*	*
	Markree Castle	50	32	46·9	35·5	41·4	+ 2·6	14	28	7	1·56	+0·76	14·3	+ 5·8	29	+13
	Brookeborough	50	33	46·4	35·9	41·4	+ 4·2	12	26	7	1·26	+0·36	*	*	*	*
	Armagh	51	33	46·2	36·7	41·6	+ 3·5	12	23	7	0·70	+0·08	14·8	+ 6·8	30	+14
	Donaghadee	49	32	46·3	37·6	42·1	+ 1·1	19	12	7	0·67	+0·04	*	*	*	*
	Edgeworthstown	47	32	42·7	34·8	38·9	+ 1·0	2	27	7	1·12	+0·42	*	*	*	*
10. IRELAND, S.	Dublin	53	35	48·3	39·3	44·0	+ 3·1	25	8	7	0·68	+0·16	13·2	+ 8·2	38	+17
	Parsonstown	52	33	48·0	36·9	42·7	+ 3·7	26	14	6	1·19	+0·49	16·1	+ 6·1	32	+13
	Kilkenny	51	33	47·6	36·0	42·0	+ 2·0	16	17	7	1·24	+0·52	*	*	*	*
	Waterford	52	34	48·6	38·0	43·5	+ 1·6	27	11	7	2·02	+1·10	*	*	*	*
	Roche's Point	52	36	49·9	41·9	46·1	+ 2·7	29	0	7	2·06	+0·94	*	*	*	*
	Valencia	53	37	51·3	41·1	46·5	+ 1·6	35	3	7	2·99	+1·63	14·9	+ 4·1	28	+ 9
	Killarney	54	34	49·7	39·7	44·9	+ 2·7	30	6	7	3·09	?	*	*	*	*
	Foynes	?	?	?	?	?	?	?	?	7	2·06	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	53	39	52·0	44·6	48·5	+ 2·1	16	0	7	1·43	+0·53	*	*	*	*
	Jersey	52	36	49·4	39·6	44·7	+ 1·6	29	7	5	1·38	+0·54	13·9	+ 0·5	25	+ 2

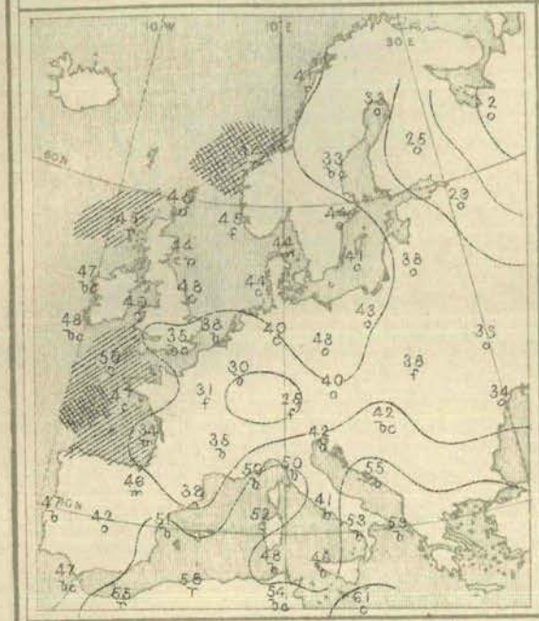
Stations marked ℳ are in connection with the Royal Meteorological Society, and those marked ℒ with the Scottish Meteorological Society.

* An asterisk is inserted in all places for which the information is not usually received.

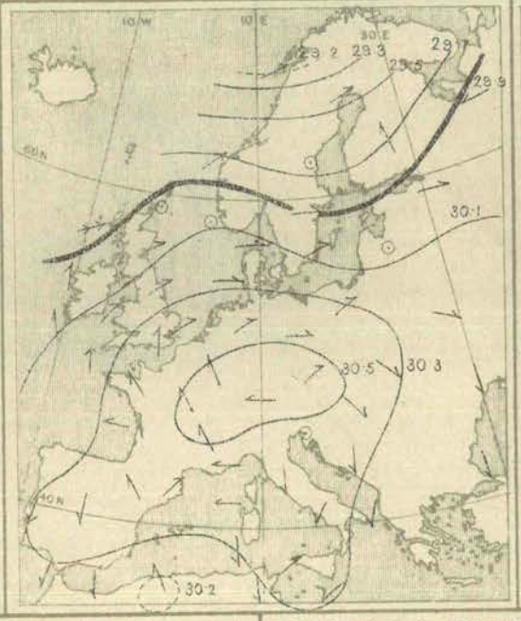
† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row) at the Kew Observatory, and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

Sunday, 17th December.

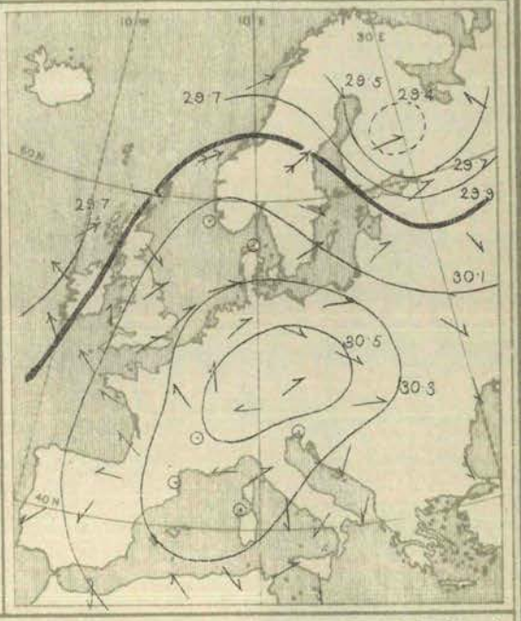
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fine over the greater part of the United Kingdom, but dull in the north of Scotland, with rain at Stornoway, and passing showers at Aberdeen. Dull over a considerable portion of the Continent, with fog in Holland, central France, Poland, and the southern parts of Germany, and with rain in the west of Norway. Fine and bright in Italy, Austria, and the southern parts of France and Spain. Rain setting in later at many of our western and extreme northern stations, and dull weather spreading over England.

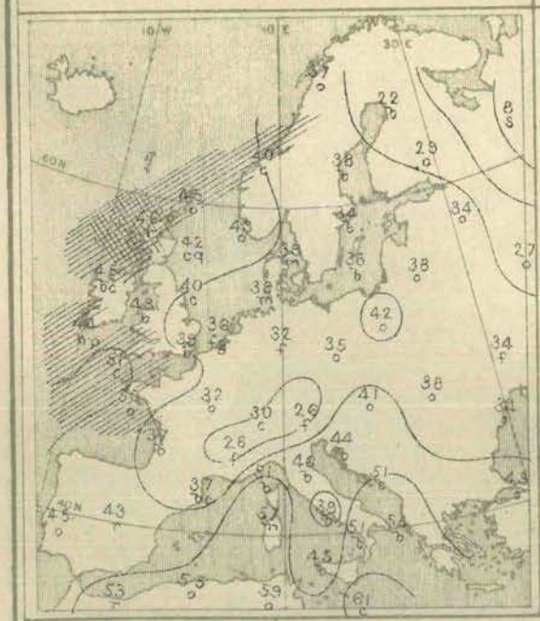
Temperature fallen in most countries—briskly over England, but risen over Sweden and the Baltic. Morning readings highest, 61° at Malta, 59° at Brindisi, 58° at Algiers, and 55° at Lesina and Oran; ranging between 48° and 50° in the extreme south-west of our Islands. Lowest, (1) 2° at Archangel, and 25° at Kuopio; (2) 25° at Munich, 30° at Limoges, and 31° at Paris; below 40° over the eastern and central parts of England. Rising during day to 50° or more at several of our own western and northern stations, and reaching 54° at Nairn; remaining below 40° in some parts of central France, but exceeding 60° in the Riviera, as well as at many of the Italian stations.

Wind light to moderate from the South-Eastward in the west of France, and from the Southward or South-Westward over the greater part of the United Kingdom, but strong to a gale from West-South-West in the Hebrides, moderate to strong from the Westward or South-Westward over Scandinavia, Denmark, and north Germany; light from the North-Westward or Northward over Austria and the south of Russia, North-Easterly in Spain and Italy; variable in the south of France and also in Algeria. Subsequently backing to the South-Eastward on our western coasts, and increasing to a slight gale in the south of Ireland.

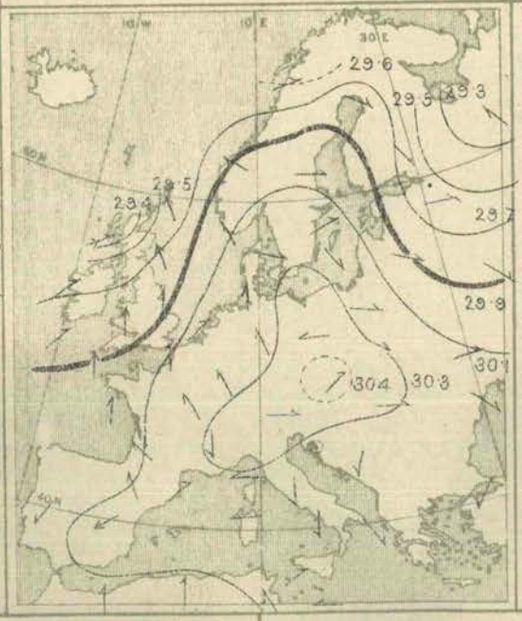
Barometer highest, 30·5 ins. and upwards over the east of France and the southern parts of Germany; 30·3 ins. and upwards in a large anticyclone covering the greater part of central and southern Europe, and extending over the south and south-east of England. Lowest, 29·2 ins. and less in a depression over the north of Norway, 29·8 ins. and less in another system lying to the north of the Hebrides. New disturbance approaching the Irish coasts later, and barometer falling decidedly in the west. Norwegian depression moving south-eastwards to Finland.

Monday, 18th December.

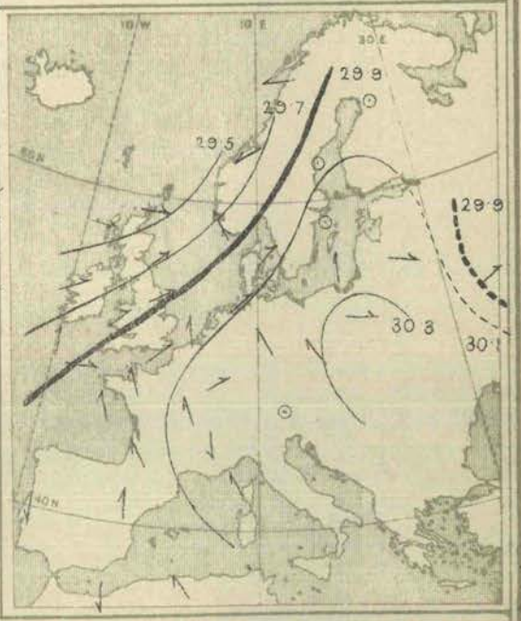
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather cloudy or overcast in most parts of the United Kingdom, with rain in Ireland and the Hebrides. Fine and bright in Sweden and also in Italy and the south of France, but cloudy in most other Continental countries, with fog in many parts of France, Germany, and the south of Russia, rain at Madrid, and snow at Archangel. Sky clearing later at several of the English stations, but heavy rain falling in Ireland, and small amounts in the western and northern parts of Great Britain. Evening reports from southern and eastern Europe nearly all wanting.

Temperature fallen generally. Morning readings highest (1) 61° at Malta, 59° at Tunis, and 57° at Sanguinaire and La Calle; (2) 51° at Scilly, and 50° at Pembroke and Brest; above 45° at many of our western and northern stations. Lowest, 8° at Archangel, 21° at Kharkov, 22° at Haparanda, and 24° at Uleaborg; below the freezing point in many parts of Russia, Germany, and central France. Rising during day to between 45° and 50° in many parts of the United Kingdom, but reaching 53° at Scilly. Remaining below 40° at some of the central French stations, but exceeding 60° in the Riviera.

Wind Southerly (South-East to South-West) over the greater part of western Europe, light to fresh in force generally, but strong to a gale in the Hebrides. Light from the Westward in Sweden, and from the North-Westward in Russia. Northerly in Italy and North-Easterly in Spain, but Southerly and South-Easterly in Algeria. No important change occurring during day, but gale in Hebrides subsiding.

Barometer highest, 30·20 ins. to 30·45 ins. in a large anticyclone covering the whole of central and a considerable portion of southern Europe. Lowest, 29·3 ins. and less in a depression over northern Russia; 29·4 ins. and less in another system to the northward of the Hebrides (small secondary disturbances lying over various parts of our western coasts). Depression near Hebrides subsequently passing away to the north-eastward, but new disturbance beginning to approach the Irish coasts in evening.

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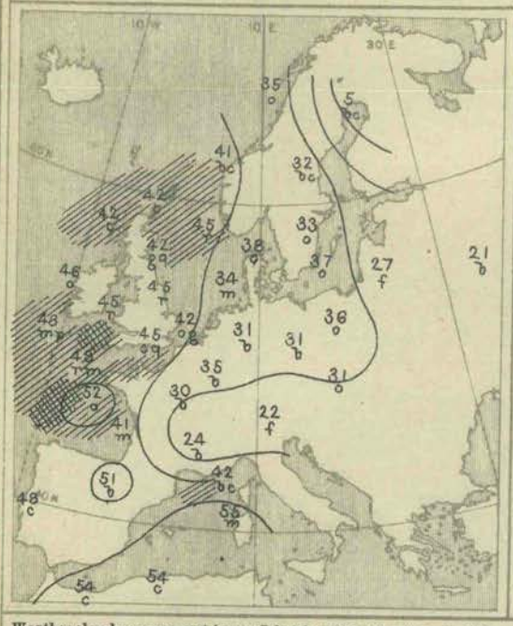
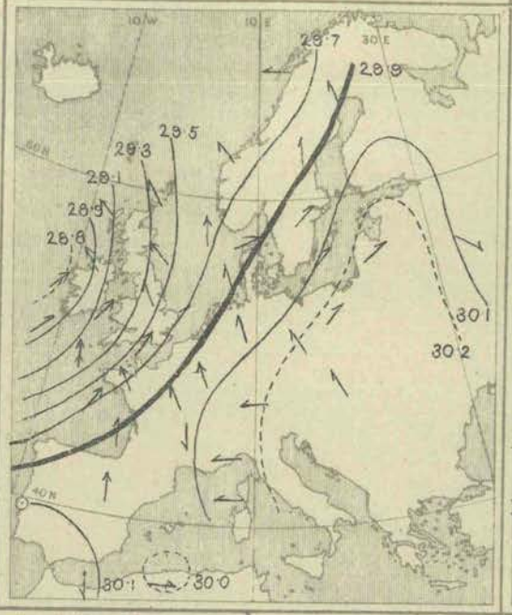
Tuesday, 19th December.

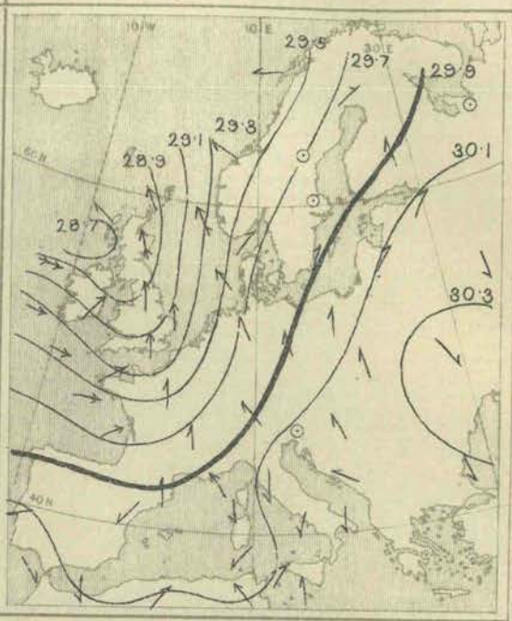
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather cloudy or overcast in our Islands, with rain at most of the western stations. Reports from eastern and southern Europe nearly all wanting; weather fine in Sweden, France, and many parts of Germany, but dull in Norway, with rain at Skudesnaes. Rain falling later in nearly all the western countries, amounts being heavy in the south-west of our Islands and the west of France. Snow falling at some of the Russian stations.

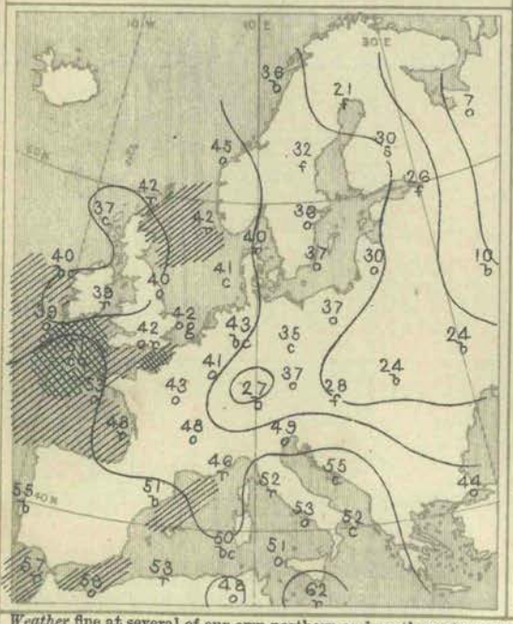
Temperature fallen in Scotland and also in Sweden, Germany, and the central and southern parts of France, but risen elsewhere. Morning readings highest, (1) 55° at Sanguinaire, 54° at Oran and Algiers; (2) 52° at Brest, 51° at Biarritz, and 50° at Lorient; above 45° in the south-western parts of the United Kingdom generally. Lowest, 5° at Haparanda, 21° at Moscow, 22° at Munich, and 24° at Lyons; below the freezing point in many parts of Russia and central Europe, and below 40° in the east of Scotland. Rising during day to 50° or a little above it on the south coasts of Ireland and England; to 55° or more at several of the western and southern stations in France, and to 60° or more over the southern parts of Spain and Italy.

Wind Southerly or South-Easterly over nearly the whole of western Europe, with Scandinavia and the Baltic; strong in force in many parts of England and Ireland, with a gale on our west and south-west coasts. Moderate from the Eastward over the southern parts of France and Germany; variable in Algeria. Subsequently increasing to a fresh or strong gale from the Southward over the whole of Great Britain, and from the Westward in Ireland. North-Easterly breezes reported over Italy in evening, with a gale at Turin, and light North-Westerly breezes in the south of Russia.

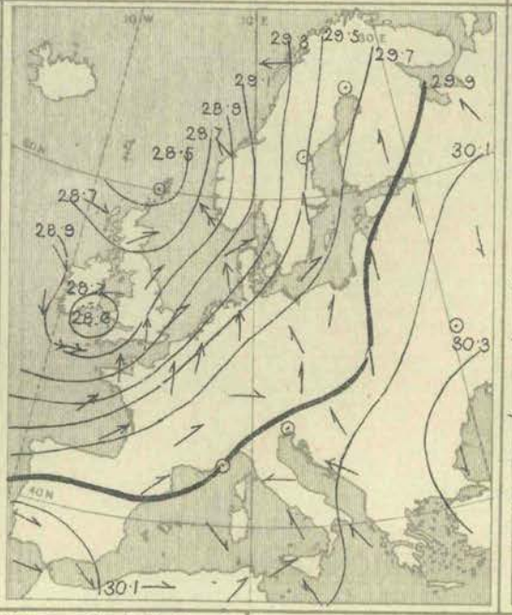
Barometer highest, 30·2 ins. and upwards over western Russia, and apparently over Austria and Italy. Lowest, 28·8 ins. and less in a depression lying off the north-west of Ireland; gradients steep over the greater part of our Islands and the North Sea. Depression subsequently moving northwards to the west of Scotland, but at the same time spreading out considerably to the eastward; brisk rise of the barometer taking place on our west and south-west coasts, but rapid fall in the north and east.

Wednesday, 20th December.

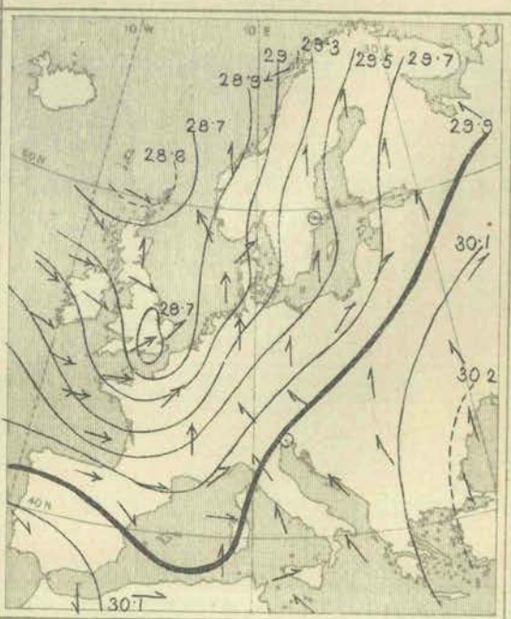
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fine at several of our own northern and north-western stations, as well as in Spain and some parts of Germany. Dull in nearly all other parts of our Islands and the Continent, with rain over England, the south of Ireland, and many parts of France, as well as in Denmark and the south of Norway. Rain falling later in all but the north-eastern parts of our Islands, as well as in France, Germany, and Sweden; amounts large at several of the English and French stations. Lunar halos seen over England at night, and thunder occurring at Ardrossan.

Temperature fallen in our Islands and also in Russia and Austria, but risen in most other countries. Morning readings highest, 62° at Malta, 58° at Nemours and Oran, and 57° at San Fernando; above 50° at many of the Mediterranean and Adriatic stations, as well as in the extreme south-west of England and the north-west of France. Lowest, 7° at Archangel, 10° at Moscow, 12° at Kharkov, and 21° at Haparanda. Daily maxima below 40° in the north of Scotland, but thermometer rising to between 45° and 50° at most of the English and Irish stations, to 55° or more in the south of France, and to 60° or more in some parts of Italy.

Wind moderate from the Westward in the north of our Islands, but strong to a gale from the Southward or South-Westward on our southern coasts, as well as over the Netherlands and the north of France. Southerly or South-Easterly over Scandinavia, Denmark, and Germany, with a gale in the south of Norway, Easterly or South-Easterly over Italy; Westerly in Algeria and the south of Spain. Subsequently blowing a violent gale from the Westward (South-West to North-West) over the western parts of the English Channel, and a strong gale on our south and south-east coasts generally.

Barometer highest, 30·3 ins. and upwards in an anticyclone over the Black Sea and Asia Minor; 30·1 ins. and upwards in another system over the south of Spain. Lowest, 28·5 ins. and less in a depression off the north of Scotland, 28·6 ins. and less in a well-marked secondary system over the St. George's Channel. Latter disturbance subsequently moving north-eastwards, but becoming very complex owing to the formation of other systems over the central and southern parts of England.

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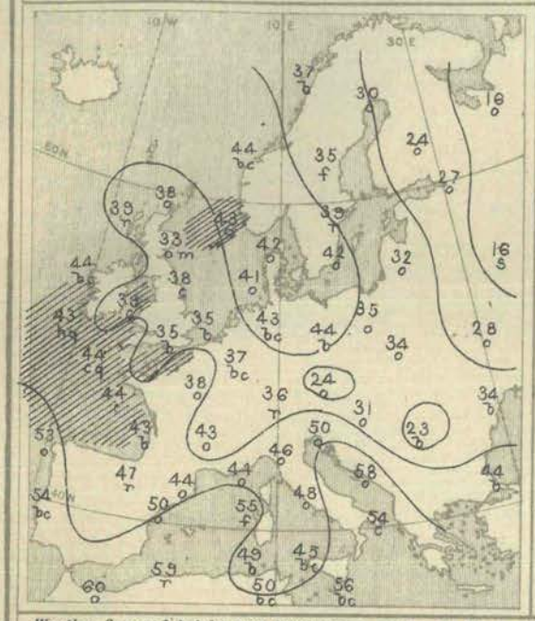
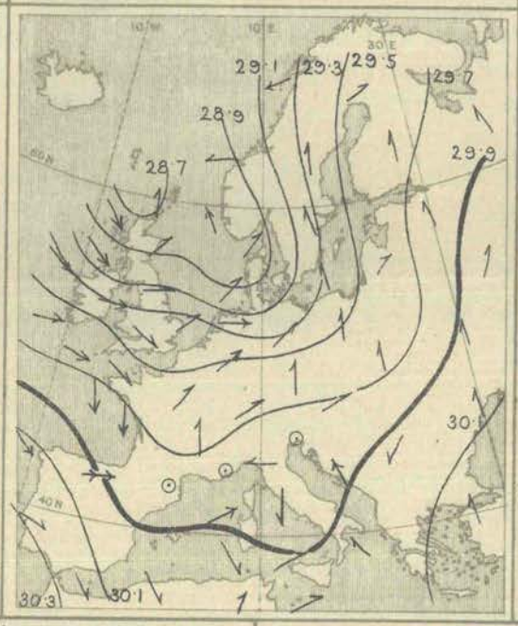
Thursday, 21st December.

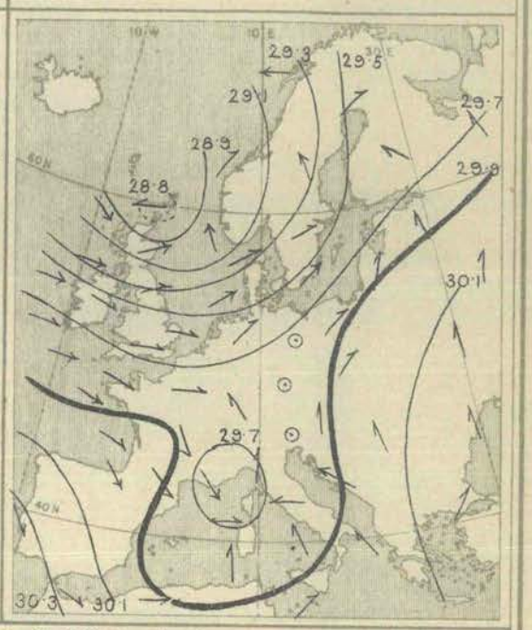
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fine and bright over England, as well as in the southern parts of Spain and Italy. Cloudy or overcast elsewhere, with rain in the north of Scotland and many parts of France and Germany, and with hail showers in the west and north of Ireland. Snow reported at Helsingfors and Moscow. Fine weather setting in later in nearly all parts of western Europe, but rain falling at night in the west and north of our Islands. Heavy rain occurring in Italy and also at Bilbao.

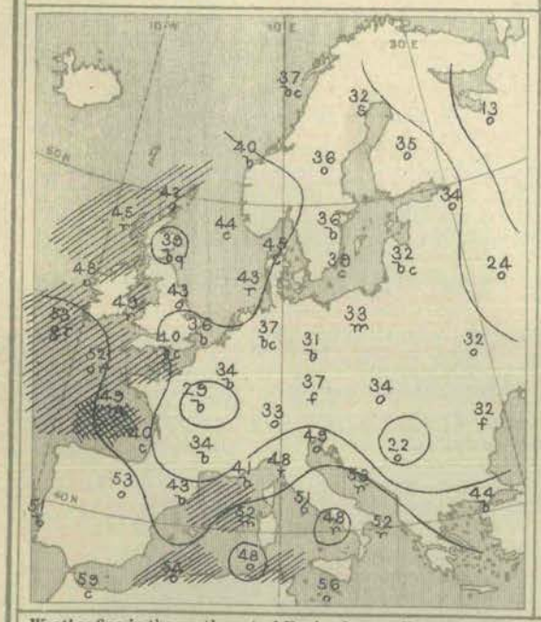
Temperature risen in Ireland and also in Sweden, Russia, and Germany, fallen in most other countries. Morning readings highest, 60° at Nemours and Oran, 59° at Algiers, 58° at Lesina, and 56° at Malta, above 50° at several of the Mediterranean stations, as well as on the coasts of the Spanish Peninsula. Lowest, 16° at Archangel and Moscow, 17° at Kharkov, and 23° at Hermanstadt, below the freezing point in many parts of Russia, Germany, and Austria, and very little above it in the east of Scotland. Rising during day to 50° or more on several parts of our western coasts, but remaining below 40° in the north and east of our Islands. Frost occurring in the south-east of England at night.

Wind strong from the Westward or North-Westward on the western coast of our Islands and France, but moderate from the South-Westward in the eastern parts of Great Britain, and strong from the same quarter over north Germany and the Netherlands. Southerly or South-Easterly over Scandinavia, Russia, and eastern Germany; strong in force in the south of Norway. South-Easterly or Easterly in Italy, and variable in Algeria and the south of France. Subsequently blowing a strong gale from the Westward in the west of Scotland, backing to the South-Westward on our western coasts at night.

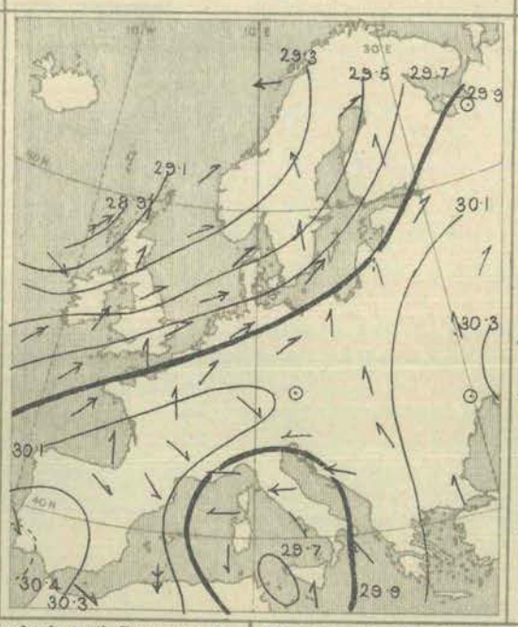
Barometer highest, 30·3 ins. and upwards in an anticyclone lying to the south-westward of the Spanish Peninsula, 30·2 ins. and upwards in another system over the south of Russia. Lowest, 28·7 ins. and less in a depression off the north of Scotland; secondary systems reported over the eastern parts of the North Sea. Depression in north subsequently moving eastwards, but new disturbance beginning to approach our western coasts at night. Secondary disturbances over North Sea rapidly filling up.

Friday, 22nd December.

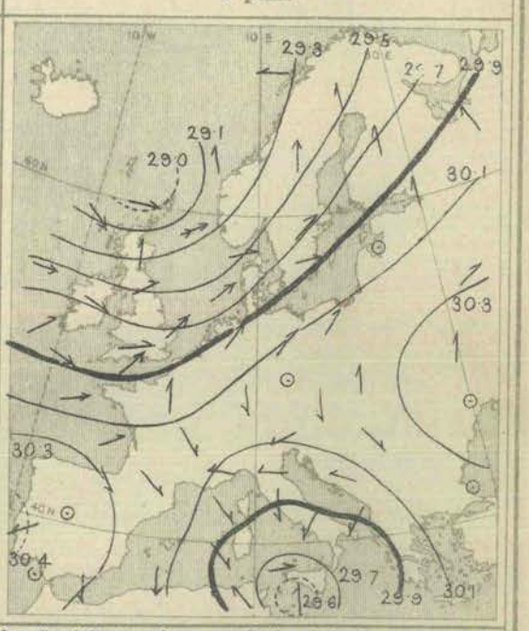
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather fine in the south-east of England, as well as over the Netherlands, north Germany, and the greater part of France. Rainy in all the more western and northern parts of the United Kingdom, and in Italy and Austria; dull in Scandinavia, Russia, and south Germany, with rain at Faerder. Improvement taking place later in the west and north of our Islands, but steady rain falling in the south-east of England, as well as in Norway, the Netherlands and north of France, and in Italy.

Temperature fallen in the central and southern parts of Europe, risen elsewhere. Morning readings highest, (1) 59° at Oran, 56° at Nemours and Malta, and 54° at Algiers; (2) 53° at Valencia (Ireland), and 52° at Roche's Point and Scilly. Lowest, 13° at Archangel, 20° at Kharkov, 22° at Hermanstadt, 24° at Moscow, and 29° at Belfort. Rising during day to 50° or a little above it at several of our own stations, and also in the west and south of France, and reaching 57° at Lisbon, and in Italy, and to 60° and more over Algeria. Frost occurring in the south-east of England at night.

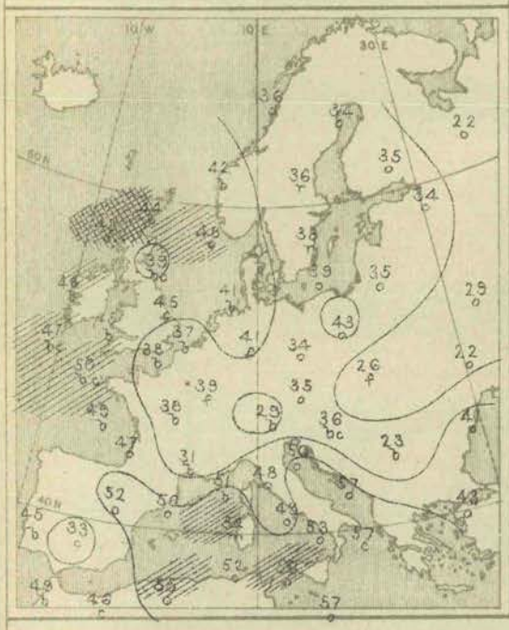
Wind strong from the Southward or South-Westward over nearly the whole of north-western and northern Europe, but moderate on the east coasts of Great Britain, and also in the west of Norway. Light from the Southward over Russia, variable in Austria; Easterly or South-Easterly in Italy, Northerly or North-Westerly in Spain and Algeria, with a gale at Algiers. Subsequently increasing to a moderate or fresh gale from the South-Westward in the English Channel, but veering to the Westward and moderating in most other parts of our Islands.

Barometer highest, 30·4 ins. and upwards in an anticyclone lying to the south-westward of Portugal; 30·3 ins. and upwards in another system over the south of Russia. Lowest, 29·0 ins. and less in a depression off the north-west of Scotland (gradients rather steep over north-western Europe generally), and 29·8 ins. and less in a large disturbance over the Mediterranean to the west of Italy. Depression in north-west subsequently travelling north-eastwards, but secondary disturbances moving across England during day.

Saturday, 23rd December.

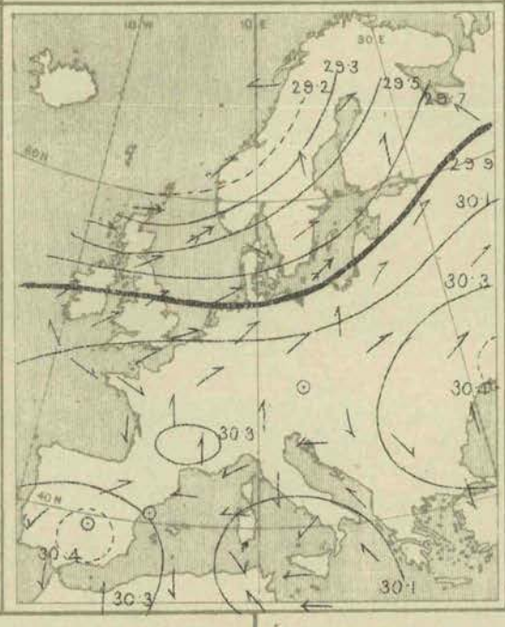
Temperature and Weather.

8 a.m.

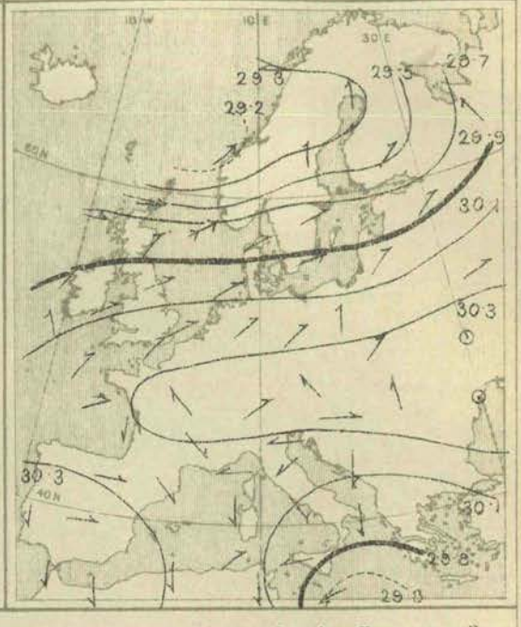


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning dull and foggy over south-eastern Europe, dull over Italy and the Adriatic, very fine over France, the United Kingdom, and North Sea; dull and unsettled over northern Europe, with rain at two out of the four Swedish stations. Rain later in the west and north of our Islands and also over northern Europe, but fine weather prevailing elsewhere; heavy dew over the south-eastern counties of England in the night.

Temperature in morning exceeding 50° on the southern shores of the Mediterranean and all the shores of the Adriatic, as well as at Bilbao and Biarritz, touching 55° at Perpignan and Scilly, 48° at Belmullet and Skudesnaes. Lowest, (1) 22° at Archangel, 29° at Moscow, 34° at St. Petersburg; (2) 22° at Kiev, 23° at Hermanstadt, 29° at Kharkov; (3) 29° at Munich, 31° at Lyons, 32° at Belfort. Rising later to between 60° and 70° over Algeria and the south of Italy, to between 55° and 58° over many parts of southern Europe, and to between 50° and 55° over the south and south-west of the British Islands generally.

Wind light and variable (anticyclonic) over eastern, central, and southern Europe generally; cyclonic, Westerly to Southerly, over the northern and north-western countries, and strong to a gale in force at the more northern stations; cyclonic, Easterly to Northerly, over the Mediterranean, and blowing strongly at Malta and some Algerian stations. Backing more to the Southward in Ireland later, but blowing hard from West-South-West in the west of Norway; very little change elsewhere.

Barometer highest, 30·4 ins. and more to 30·3 ins., over Hungary and the south of Russia, and exceeding 30·2 ins. in a broad "col" spreading thence across southern Europe to the Bay of Biscay and Atlantic. Lowest, 29·2 ins. and less, over the west of Norway, and apparently still lower over the adjacent parts of the Atlantic; gradients somewhat steep in the north, slight elsewhere. Low-pressure area in north spreading eastwards later; new but not deep disturbance approaching Ireland from the Atlantic.

GENERAL NOTES.

At the commencement of the week a large anticyclone extended from central and southern Europe over the eastern and south-eastern parts of our Islands, while depressions were travelling eastwards across the northern parts of Scandinavia and Russia. The anticyclone soon moved away, however, to the eastward, and for the remainder of the week the weather over the north-western and northern countries was affected by a series of depressions which skirted our extreme north-western and northern coasts, and which afterwards moved away to the north-eastward. The prevailing winds were, therefore, Southerly or South-Westerly with gales in many places, and with frequent falls of rain, especially in the more western and northern parts of our Islands. On the 20th, when a well-marked secondary system moved north-eastwards across England, the barometer fell to between 28·6 ins. and 28·7 ins. in many places, and the wind increased to a violent gale from the westward over the western parts of the Channel. Towards the close of the week a new anticyclone began to spread north-eastwards from Spain, and the general conditions showed some signs of improvement.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 302.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	8·1	?	17	?	EASTBOURNE	12·1	?	22	?
OSWALDKIRK (Yorkshire)	6·1	?	12	?	TENBY	9·2*	?	19*	?
WORKSOP	3·6	- 4·9	7	- 7	NEWQUAY	9·4	?	17	?
THURCASTON (Leicestershire)	8·6	+ 3·6	16	+ 6	TORQUAY	11·8*	?	21*	?
MARGATE	11·7	?	22	?	ARLEY COTTAGE (County Cavan)	14·4	?	29	?
WESTBOURNE (Sussex)	12·2*	?	23*	?	GUERNSEY	5·0*	?	9*	?
BRIGHTON	10·9	?	20	?					

* The values at Westbourne, Tenby, Torquay and Guernsey are obtained by Jordan's Photographic Recorder.

REPORTS received too late for insertion in their proper places.

DATE OF REPORT.	NAMES OF STATIONS.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-Degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°	°	°		Inches.	Inches.				
Sept. 16th, 1893.	Jersey	—	—	—	—	—	—	—	—	—	—	—	46·7	+ 4·5	53	+ 5
,, ,, ,,	Brighton	—	—	—	—	—	—	—	—	—	—	—	54·3	?	62	?
,, ,, ,,	Newquay	—	—	—	—	—	—	—	—	—	—	—	31·0	?	35	?
,, 23rd, ,,	Edgeworthstown	?	33	?	39·4	?	?	?	?	3	0·34	- 0·40	—	—	—	—
,, 30th, ,,	Scarborough	61	40	56·9	44·6	50·5	- 2·1	60	0	5	0·79	+ 0·12	—	—	—	—
Dec. 9th, ,,	Lairg	49	28	46·1	24·3	40·4	+ 3·9	11	31	7	0·99	+ 0·09	—	—	—	—
,, ,, ,,	Glencarron	59	32	? 44·6	? 37·5	? 41·2	? + 3·4	? 7	? 19	7	4·99	+ 2·85	—	—	—	—
,, ,, ,,	Blackpool	—	—	—	—	—	—	—	—	—	—	—	3·9	- 2·3	5	- 8
,, 16th, ,,	Edgeworthstown	52	29	43·3	23·7	38·7	+ 0·1	4	31	6	0·88	+ 0·13	—	—	—	—

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WEEKLY WEATHER REPORT.

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VOL. X. No. 52.] *Third Series.* WEEK ENDING SATURDAY, 30TH DECEMBER, 1893. [*Price 6d.* *Annual Subscription, post paid, £1 10s. 0d.*

I.—SUMMARY OF TEMPERATURE, RAINFALL, AND DURATION OF BRIGHT SUNSHINE IN THE UNITED KINGDOM, FOR AGRICULTURAL AND SANITARY PURPOSES.

Explanation of the Summary.—The distribution of the Districts, and the Stations from which reports are received, are shown on the second page of this number. TEMPERATURE.—The *Daily Mean* is obtained from the maxima and minima by applying a suitable correction determined for each month. The *Mean for the Week* is the mean daily temperature (obtained as above) in the corresponding week, derived from 20 years' observations (1871-90). ACCUMULATED TEMPERATURE indicates the combined amount and duration of the excess or defect of temperature above or below 42° F. for the period named, and is expressed in Day-degrees—a "Day-degree" signifying 1° continued for 24 hours, or any other number of degrees, for an inversely proportional number of hours. The *Means* with which the current values are compared are those for the corresponding period in the ten years 1881-90. RAINFALL.—The *Mean Amounts* are those for the corresponding periods in the twenty-five years 1866-90, but the *Mean numbers of Rainy Days* are those for the ten years 1881-90 only. BRIGHT SUNSHINE.—The *Mean Values* employed are those for the corresponding periods in the ten years 1881-90.

A more detailed explanation of the meaning of "Accumulated Temperature" will be found in the Preface to Vol. I. Second Series.

Temperature of the Air.

	DISTRICTS. (See p. 308.)	Observed during the Week. Highest.	Lowest.	Averages of Daily Maxima.	Daily Minima.	Daily Mean.	Above or below the Mean for the Week.	Accumulated. For the Week. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.	From January 1st, 1893. Above 42°	Difference from Mean.	Below 42°	Difference from Mean.
		°	°	°	°	°	°	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.	Day-deg.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	53	32	47·3	38·9	43·3	5 above.	22	+17	9	−23	2395	+518	734	− 49
	1. SCOTLAND, EAST	55	27	46·6	37·9	42·5	6 above.	21	+16	11	−28	2675	+313	837	− 23
	2. ENGLAND, N.E.	50	30	45·4	37·5	41·6	4 above.	10	+ 4	19	−16	2973*	+441	652*	− 68
	3. ENGLAND, EAST	49	23	43·5	32·7	38·3	1 above.	4	− 3	35	− 6	3448	+517	795	− 33
	4. MIDLAND COUNTIES	51	25	44·9	34·6	40·0	3 above.	8	0	30	−11	3530	+657	796	− 39
	5. ENGLAND, SOUTH	51	24	45·2	35·9	40·7	1 above.	9	− 3	25	− 6	3799	+577	559	− 52
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	51	34	48·0	42·7	45·5	6 above.	25	+16	0	−28	2964	+502	539	− 65
	7. ENGLAND, N.W.	55	31	47·3	39·8	43·7	4 above.	21	+12	6	−23	3450	+778	459	− 131
	8. ENGLAND, S.W.	52	27	47·0	39·4	43·4	2 above.	21	+ 6	7	−15	3756	+707	362	− 81
	9. IRELAND, NORTH	53	29	48·2	40·6	44·6	5 above.	24	+12	4	−22	3187	+551	440	− 97
	10. IRELAND, SOUTH	56	27	49·9	42·5	46·4	5 above.	31	+12	0	−21	3629	+602	314	−106
	—CHANNEL ISLANDS	53	34	48·9	42·1	45·6	1 above.	25	0	0	− 8	4363	+835	81	− 70

Rainfall.

	DISTRICTS. (See p. 308.)	For the Week. Number of Rainy Days.	Total Fall.	More or less than the mean for the Week.	From Jan. 1st, 1893. No. of Rainy days.	Difference from Mean.	Total fall.	Difference from Mean.
			10ths of in.	10ths of ins.			Ins.	Ins.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	5	10	3 less.	252	+ 7	58·5	+ 8·4
	1. SCOTLAND, EAST	4	6	1 less.	199	− 1	27·4	− 4·8
	2. ENGLAND, N.E.	3	1	4 less.	173	−14	21·0*	− 6·0
	3. ENGLAND, EAST	2	1	4 less.	171	−14	21·1	− 5·3
	4. MIDLAND COUNTIES	3	2	4 less.	164	−16	20·7	− 8·4
	5. ENGLAND, SOUTH	2	1	5 less.	162	−15	23·6	− 4·6
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	5	15	2 more.	205	− 6	42·8	− 8·6
	7. ENGLAND, N.W.	4	5	3 less.	191	− 6	31·5	− 4·3
	8. ENGLAND, S.W.	3	3	7 less.	173	−32	33·8	− 7·8
	9. IRELAND, NORTH	4	9	1 more.	217	−12	34·0	− 2·7
	10. IRELAND, SOUTH	4	10	1 more.	189	−21	32·8	− 6·3
	—CHANNEL ISLANDS	2	1	8 less.	185	−34	28·7	− 5·9

Bright Sunshine.

	DISTRICTS. (See p. 308.)	For the Week. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.	From January 1st, 1893. Hours recorded.	Difference from Mean.	Percentage of possible Duration.	Difference from Mean.
Principal Wheat-producing Districts.	0. SCOTLAND, NORTH	1	− 4	2	− 8	993	−160	23	− 3
	1. SCOTLAND, EAST	6	− 1	13	− 2	1373	+ 28	31	0
	2. ENGLAND, N.E.	7	− 1	13	− 2	1558	+318	35	+ 7
	3. ENGLAND, EAST	15	+ 6	29	+ 10	1831	+322	42	+ 8
	4. MIDLAND COUNTIES	8	0	16	0	1715	+568	39	+ 8
	5. ENGLAND, SOUTH	16	+ 5	30	+ 9	1875	+413	43	+ 10
Principal Grazing, &c., Districts.	6. SCOTLAND, WEST	2	− 5	3	− 10	1541	+219	35	+ 5
	7. ENGLAND, N.W.	3	− 3	5	− 6	1500	+193	34	+ 4
	8. ENGLAND, S.W.	14	+ 3	26	+ 8	1964	+378	45	+ 9
	9. IRELAND, NORTH	5	− 4	9	− 8	1380	+148	31	+ 3
	10. IRELAND, SOUTH	8	− 1	16	− 4	1532	+ 94	35	+ 2
	—CHANNEL ISLANDS	29	+17	52	+ 30	2300	+438	52	+ 9

Bright Sunshine.—For several of the stations there are no "mean" values available, and the "difference from the mean" in some of the districts is consequently that of only a few of the stations.

General Remarks.

Weather during this period underwent a decided change. The rain and high humidity, which were again general at first, gradually gave place to drier and fairer conditions. Towards the end of the week, however, fogs were experienced at some of the English south-eastern stations; that in London on Saturday night was very dense.

Temperature again exceeded the mean, the excess varying from only 1° in England E. and S. and in the Channel Islands, to as much as 5° in Scotland N. and over Ireland, and 6° in Scotland E. and W. The highest of the maxima were recorded on December 24th, and ranged from 56° in Ireland S. to 49° in England E. The lowest of the minima were registered at the close of the week, when they ranged from between 23° and 25° over eastern, central, and southern England, to 34° in the Channel Islands.

Rainfall again exceeded the normal in Scotland W. and over Ireland, but in all other parts of the Kingdom there was a deficit, the fall over the greater part of England being very slight.

Bright Sunshine was very unevenly distributed, in some districts considerably exceeding the mean, and in others being much below it. The percentage of the possible duration ranged from only 2 in Scotland N., 3 in Scotland W., and 5 in England N.W. to 26 in England S.W., 29 in England E., 30 in England S., and 52 in the Channel Islands.

Barometer and Wind.—During the earlier days of the period depressions continued to appear off our western and north-western coasts, but they were less deep than those of the weeks immediately preceding, and did not advance much over us. As the week progressed, a high-pressure area gradually spread over the United Kingdom from the Continent, and the barometer became very high and comparatively steady. Fresh or strong Southerly to South-Westerly winds were prevalent during the earlier part of the time, but later on light or moderate breezes from the Westward became general over the greater part of the Kingdom, although in the extreme south-east the winds were rather more variable.

* This value has been altered owing to the receipt of further information for a preceding week.

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II.—DATA from which the SUMMARY on page 307 has been calculated.

Districts.	Names of Stations.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°				Inches.	Inches.				
0. SCOTLAND, N.	Sumburgh Head	48	34	46·9	37·9	42·6	+ 3·3	21	11	6	0·68	−0·23	*	*	*	*
	Stornoway	49	35	47·3	38·7	43·2	+ 4·3	22	9	6	0·67	−0·58	2·0	− 4·0	5	− 8
	Wick	53	35	47·3	37·9	42·8	+ 5·2	23	11	4	0·30	−0·62	*	*	*	*
	Lairg Ⓢ	51	33	46·7	36·9	42·0	+ 6·1	13	14	4	0·43	−0·42	*	*	*	*
	Glencarron Ⓢ	49	32	46·8	39·5	43·3	+ 6·0	20	7	6	2·26	+0·06	*	*	*	*
	Fort Augustus Ⓢ	50	32	48·4	40·0	44·4	+ 6·2	25	6	4	0·67	−0·38	0·0	?	0	?
	Fort William Ⓢ	49	36	47·8	41·6	44·8	+ 5·6	21	1	7	2·15	+0·02	0·0	?	0	?
1. SCOTLAND, E.	Nairn	55	34	49·7	36·9	43·6	+ 6·1	33	14	3	0·18	−0·26	*	*	*	*
	Aberdeen	47	32	44·9	36·1	40·7	+ 3·4	8	24	4	0·64	−0·03	8·1	− 2·2	18	− 3
	Braemar Ⓢ	47	33	44·1	38·2	41·3	+ 7·1	6	16	4	0·43	− 0·24	5·5†	?†	12†	?†
	Ochtertyre Ⓢ	49	34	46·4	40·0	43·3	+ 7·1	18	6	5	1·27	+0·25	*	*	*	*
	Leith	52	38	49·1	41·3	45·4	+ 6·5	27	2	3	0·62	+0·20	*	*	*	*
	Marchmont Ⓢ	48	27	45·6	35·0	40·5	+ 4·2	10	28	3	0·36	−0·32	7·8	?	16	?
2. ENGLAND, N.E.	Alnwick Castle	48	34	46·0	39·3	42·8	+ 5·2	17	8	4	0·12	−0·52	*	*	*	*
	Durham	49	35	46·5	36·3	41·6	+ 4·9	13	25	3	0·12	−0·48	9·4	− 0·4	19	0
	Shields	49	36	47·3	39·3	43·5	+ 5·2	22	8	2	0·07	−0·45	*	*	*	*
	Scarborough Ⓜ	48	30	45·5	36·3	41·1	+ 2·5	10	24	2	0·12	−0·45	*	*	*	*
	York	50	32	43·6	36·6	40·2	+ 2·9	4	21	3	0·21	−0·29	3·7	− 2·1	7	− 4
	Spurn Head	46	33	43·3	37·3	40·4	+ 1·9	4	18	2	0·08	−0·33	*	*	*	*
3. ENGLAND, E.	Hillington Ⓜ	46	24	42·6	32·7	37·9	+ 1·0	2	35	2	0·16	−0·36	17·8	+ 8·6	34	+17
	Yarmouth	44	31	42·1	34·1	38·3	+ 0·7	0	29	4	0·08	−0·47	*	*	*	*
	Geldeston	46	23	44·0	32·6	38·5	+ 0·5	6	36	2	0·04	−0·40	15·1	+ 3·2	28	+ 7
	Cambridge	48	23	44·9	31·2	38·4	+ 1·2	8	42	0	—	−0·39	12·1	+ 2·2	23	+ 5
	Rothamsted	49	24	43·9	32·9	38·6	+ 1·3	5	35	1	0·11	−0·47	15·5	?	29	?
4. MIDLAND COUNTIES	Bawtry (Hesley Hall)	49	26	44·1	33·9	39·2	+ 2·0	6	31	3	0·23	−0·26	*	*	*	*
	Loughborough	50	31	45·3	36·3	41·0	+ 3·5	9	24	2	0·15	−0·35	*	*	*	*
	Stamford (Ketton Hall)	49	25	45·1	33·0	39·3	+ 2·1	9	35	3	0·06	−0·43	*	*	*	*
	Cheadle Ⓜ	49	28	45·0	35·3	40·3	+ 3·9	8	27	3	0·25	−0·44	*	*	*	*
	Churchstoke Ⓜ	51	28	46·5	36·9	41·9	+ 4·0	13	22	2	0·39	−0·22	8·0	− 1·2	15	− 2
	Hereford Ⓜ	50	30	44·3	36·0	40·3	+ 2·1	6	24	4	0·21	−0·31	*	*	*	*
	Cirencester	51	25	45·4	31·7	38·8	+ 1·5	10	40	3	0·20	−0·47	8·0	− 1·4	15	− 2
	Oxford	49	25	43·7	33·9	39·0	+ 0·7	5	31	3	0·08	−0·40	9·2	+ 0·4	17	+ 1
5. ENGLAND, S.	London	48	28	44·1	35·0	39·7	+ 0·7	6	27	3	0·07	−0·43	6·9†	+ 1·7†	13†	+4†
	North Foreland	47	34	43·9	37·3	40·7	+ 1·3	5	18	3	0·04	?	*	*	*	*
	Strathfield Turgiss Ⓜ	47	24	42·5	33·2	38·0	+ 0·3	1	32	2	0·08	−0·42	*	*	*	*
	Dungeness	51	33	45·9	35·6	41·0	+ 1·1	11	27	1	0·04	−0·61	*	*	*	*
	Hastings (St. Leonards)	49	30	47·0	36·7	42·1	+ 2·2	23	15	1	0·09	−0·56	18·7	+ 8·0	35	+13
	Southampton	49	28	45·7	35·8	41·0	+ 1·1	10	26	2	0·11	−0·62	16·7	+ 6·5	31	+12
	Hurst Castle	51	31	47·1	39·0	43·2	+ 2·5	21	8	2	0·05	−0·59	*	*	*	*
	Stowell Ⓜ	51	27	45·2	34·7	40·2	+ 1·8	9	30	4	0·21	?	*	*	*	*
6. SCOTLAND, W.	Laudale (Loch Sunart)	51	35	?49·7	43·1	?46·5	?+ 6·5	?32	0	7	1·92	−0·15	*	*	*	*
	Glasgow	49	38	47·3	42·6	45·2	+ 7·0	22	0	3	0·98	+0·06	0·7	− 3·5	1	− 7
	Ardrossan	48	39	46·9	43·4	45·2	+ 5·0	22	0	4	1·42	+0·52	*	*	*	*
	Glenlee Ⓢ	50	34	47·8	41·9	45·0	+ 7·8	21	0	5	2·13	+0·63	*	*	*	*
	Douglas (Isle of Man)	50	36	48·3	42·6	45·6	+ 4·9	25	0	6	0 87	−0·15	2·8	− 6·6	5	−13
7. ENGLAND, N.W.	Stonyhurst	49	36	45·5	40·0	42·9	+ 5·3	15	6	5	0·51	−0·47	1·4	− 5·4	3	− 9
	Blackpool Ⓜ	49	33	47·3	36·4	42·1	+ 3·3	24	16	4	0·57	−0·14	1·8	− 4·7	3	−10
	Manchester	50	31	46·4	37·7	42·2	+ 4·7	19	12	5	0·52	−0·27	0·0†	?†	0†	?†
	Liverpool Obsy. (Bidston)	50	36	46·7	40·0	43·5	+ 4·0	19	6	4	0·26	−0·29	*	*	*	*
	Llandudno Ⓜ	55	35	49·6	41·7	45·8	+ 4·3	28	1	4	0·32	−0·35	7·7	+ 1·0	15	+ 2
	Holyhead	50	39	48·0	42·9	45·6	+ 3·0	25	0	4	0·83	0·00	*	*	*	*
8. ENGLAND, S.W.	Llandovery	52	33	46·3	36·1	41·4	+ 0·8	12	25	5	0·73	−0·49	*	*	*	*
	Pembroke	51	38	47·9	45·1	46·6	+ 3·4	32	0	3	0·33	−0·55	14·5	+ 3·8	27	+ 7
	Bristol (Montpelier)	52	29	45·9	38·0	42·1	+ 2·7	18	11	3	0·33	?	*	*	*	*
	Arlington (N. Devon)	51	30	45·9	37·9	42·1	+ 2·1	18	11	3	0·31	−0·37	*	*	*	*
	Cullompton Ⓜ	52	27	45·7	34·9	40·5	+ 1·0	10	29	2	0·24	−0·54	10·8	+ 2·8	20	+ 6
	Falmouth	52	37	48·7	42·0	45·5	+ 1·5	25	0	1	0·17	−1·03	15·6	+ 4·2	28	+ 8
	Plymouth	52	31	48·3	40·1	44·4	+ 2·4	25	5	2	0·32	−0·58	15·8	+ 5·1	29	+10
	Prawle Point	52	36	47·6	41·3	44·6	+ 2·5	21	2	2	0·16	−0·62	*	*	*	*
9. IRELAND, N.	Malin Head	50	40	47·7	43·9	45·9	+ 6·0	27	0	4	0·48	?	*	*	*	*
	Londonderry	52	33	48·5	40·5	44·7	+ 5·0	25	4	4	0·65	−0·24	*	*	*	*
	Edenfel (Omagh)	53	33	48·0	40·9	44·6	+ 6·6	23	3	4	1·24	+0·44	*	*	*	*
	Belmullet	50	42	48·9	45·1	47·1	+ 3·8	36	0	6	0·75	?	*	*	*	*
	Markree Castle	51	29	48·3	38·6	43·6	+ 4·5	25	10	5	1·28	+0·48	3·8	− 5·2	7	− 9
	Brookeborough	51	31	47·7	39·6	43·8	+ 6·3	23	7	3	1·41	+0·48	*	*	*	*
	Armagh	51	36	48·4	40·3	44·5	+ 6·3	25	5	3	0·79	+0·17	4·7	− 4·3	9	− 8
	Donaghadee	50	34	48·4	39·1	43·9	+ 3·0	25	8	4	0·53	−0·11	*	*	*	*
	Edgeworthstown	51	31	48·1	37·6	43·1	+ 5·1	26	12	4	0·96	+0·26	*	*	*	*
10. IRELAND, S.	Dublin	56	36	50·7	41·8	46·4	+ 5·3	32	1	4	0·59	+0·07	12·0	+ 0·5	23	+ 1
	Parsonstown	53	38	49·4	41·0	45·4	+ 6·2	28	3	3	0·86	+0·16	7·6	− 2·8	15	− 5
	Kilkenny	52	34	49·1	39·7	44·6	+ 4·4	28	6	5	0·70	−0·05	*	*	*	*
	Waterford	51	36	49·1	41·4	45·4	+ 3·2	26	2	4	0·65	−0·32	*	*	*	*
	Roche's Point	52	42	50·0	45·3	47·7	+ 4·2	40	0	6	0·81	−0·36	*	*	*	*
	Valencia	53	42	51·1	45·9	48·6	+ 3·7	46	0	5	2·50	+1·11	4·7	− 6·0	9	−11
	Killarney												*	*	*	*
	Foynes	?	27	?	39·7	?	?	?	?	3	0·86	?	*	*	*	*
CHANNEL ISLANDS	Scilly (St. Mary's)	53	41	50·9	45·0	48·1	+ 1·7	43	0	1	0·08	−0·81	*	*	*	*
	Jersey	53	34	46·9	39·1	43·1	+ 0·2	20	8	3	0·05	−0·75	30·6	+16·6	54	+30

Stations marked Ⓜ are in connection with the Royal Meteorological Society, and those marked Ⓢ with the Scottish Meteorological Society.

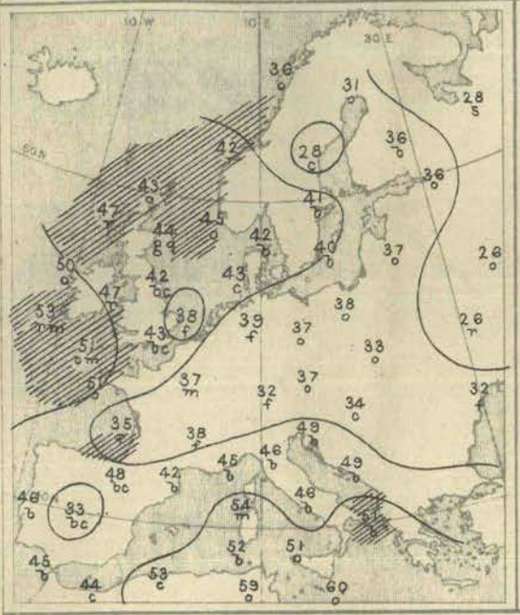
* An asterisk is inserted in all places for which the information is not usually received.

† The Sunshine values at Braemar and Manchester are obtained by Jordan's Photographic Recorder. At all other stations named in this Table Stokes' or somewhat similar Bright Sunshine Recorders are in use. For London the Sunshine values are the means of observations made in the City (Bunhill Row) at the Kew Observatory, and the Meteorological Office, Victoria Street. For additional Reports of Sunshine see last page.

Sunday, 24th December.

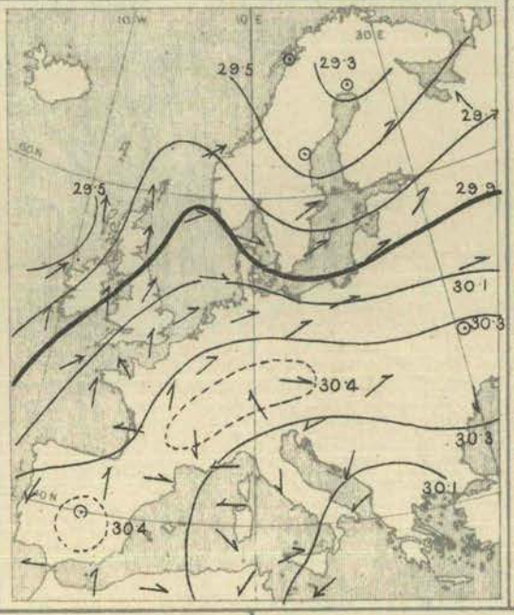
Temperature and Weather.

8 a.m.

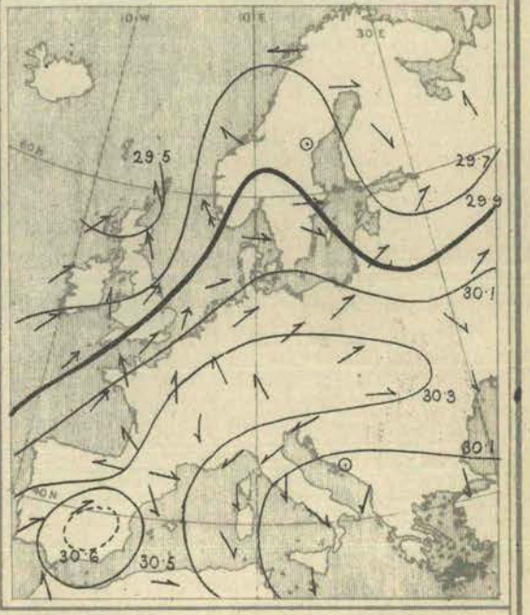


Barometer and Wind.

8 a.m.



6 p.m.



Weather at 8 a.m. fine over the Adriatic and Mediterranean, as well as in several parts of Denmark, Sweden, and Finland; cloudy and unsettled elsewhere, rainy in Ireland, Scotland, and Norway, and of a threatening appearance at Wick, snowing at Archangel; foggy and rainy in the south of Russia. Rainy in Ireland and the west of Scotland later, as well as in many parts of Scandinavia; heavy dews with wet fogs over England, slight snow showers over Russia.

Temperature in morning, 60° at Malta, and exceeding 50° at several Algerian and Spanish stations, as well as in the extreme south-west and west of the British Islands, 47° at several Scotch stations, 42° at Christiansund. Lowest, 26° at Kieff and Moscow, 28° at Archangel and Hernösand, 29° at Kharkov. Rising to 60° and more at many of the Mediterranean stations later, little change, as a whole, elsewhere.

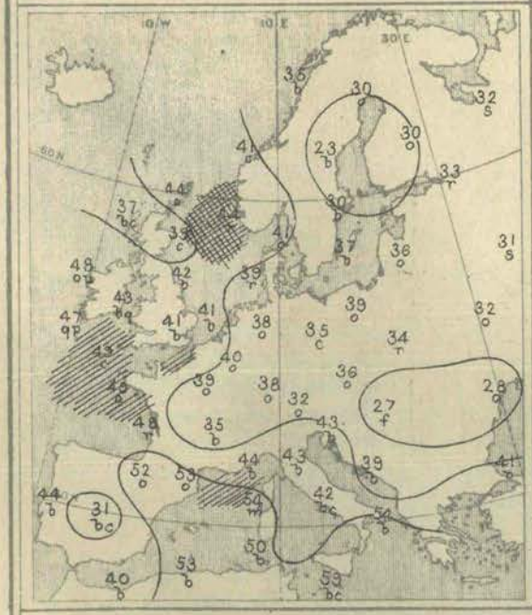
Wind (1) Southerly to South-Westerly over the British Islands—moderate in the east, strong to a gale in the west and north-west; (2) Westerly over Scandinavia, Germany, and the Baltic, light to moderate in force, but blowing a gale at Christiansund, Southerly over Finland; (3) very variable over southern Europe and the Mediterranean. Becoming very strong and squally over England later, but falling light in Ireland and also over Finland.

Barometer highest, 30·4 ins. to 30·1 ins. in a broad complex anticyclonic band stretching from Spain across France and central Europe to Russia. Lowest, 29·3 ins. and less over Lapland, and below 29·6 ins. off our extreme north-western coasts. Depression in latter region moving north-eastwards later, and a secondary advancing over England. Anticyclone over Spain increasing in intensity.

Monday, 25th December.

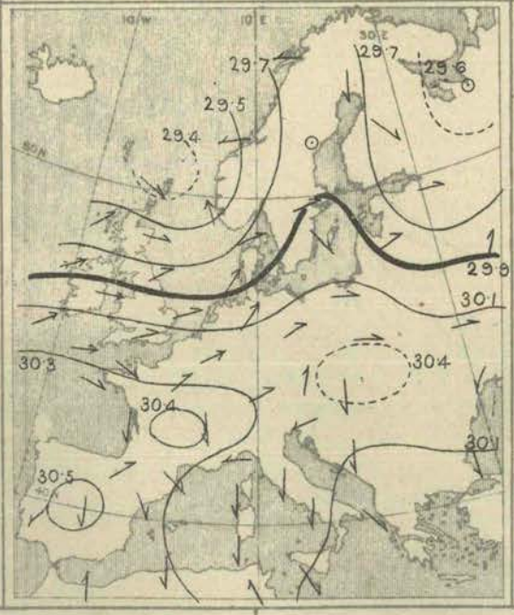
Temperature and Weather.

8 a.m.

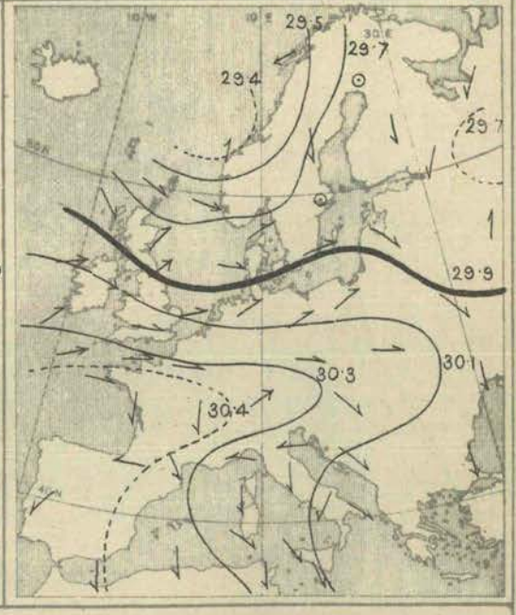


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning fine and bright over many parts of the Mediterranean, the north of France, and England; dull and changeable elsewhere, showery in the west of Ireland, rainy at St. Petersburg, Warsaw, Limoges, Rochefort, and Constantinople. Snow falling at Archangel and Moscow. Rain later with bright intervals in nearly all parts of our Islands and on the eastern shores of the North Sea, as well as over Germany; slight snow showers in Russia.

Temperature in morning, highest, 59° at Malta, and above 50° at many Algerian stations; 49° at Scilly, 48° at Belmullet, 44° at Sumburgh Head, and above 40° over our Islands and the Channel coasts of France generally. Lowest, (1) 27° to 28° in Hungary and the southern parts of Russia, 30° at Vienna, 31° at Moscow and Ulealborg, 32° at Archangel; (2) 23° at Hernösand, 30° at Haparanda. Rising to between 50° and 53° on our south-western coasts later, and to between 49° and 45° over the eastern half of England; exceeding 60° in the south of Italy and some parts of Algeria.

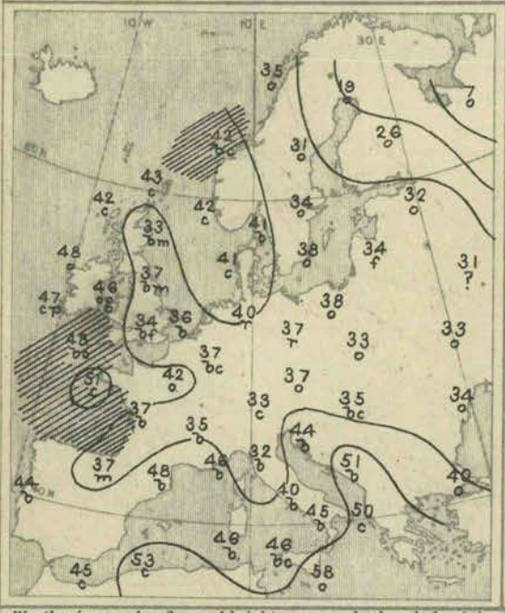
Wind (1) Westerly, moderate to a gale over the United Kingdom, Southerly, strong to a gale, on the eastern shores of the North Sea; (2) North-Westerly over Finland, Westerly over the Baltic Provinces, Southerly over central Russia; (3) Northerly in the west of France, Northerly and North-Easterly on the Spanish coast. Veering Westwards over the North Sea later, little change elsewhere.

Barometer highest, 30·5 ins. and more to 30·4 ins. over south-western Europe, and exceeding 30·2 ins. over France and central Europe as a whole. Lowest, 29·4 ins. and less in a depression over the Shetlands, below 29·6 ins. over the north of Russia, and below 30·1 ins. over the south of Italy. Rising fast in Ireland and at a moderate rate over Great Britain later, falling over Scandinavia. Rising over Russia—especially in the northern parts.

Judd & Co Ltd, Lith. 63, Carter Lane

Tuesday, 26th December.

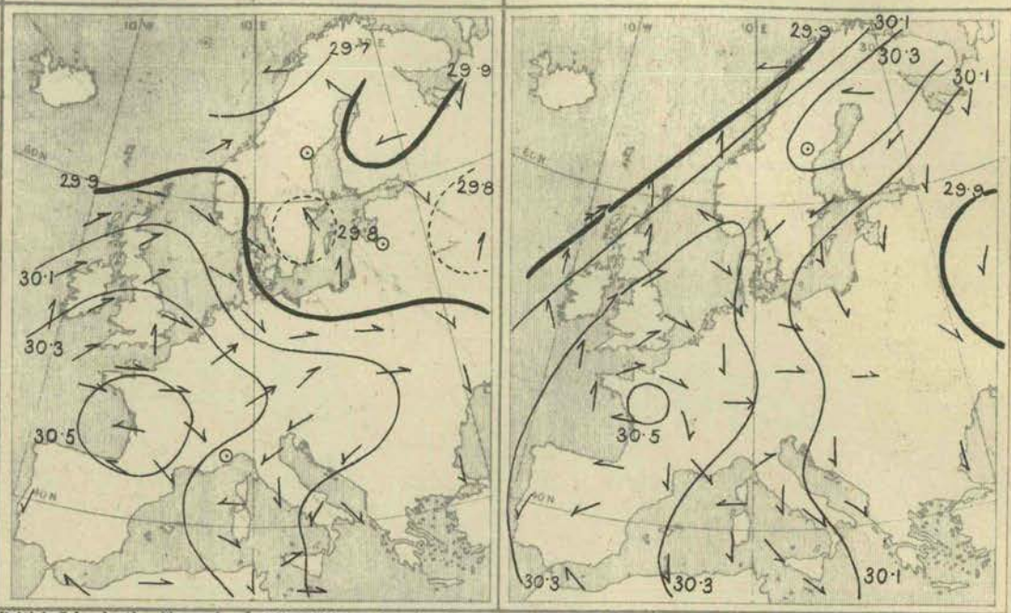
Temperature and Weather. 8 a.m.



Weather in morning fine and bright over nearly the whole of the British Islands, the Channel, the greater part of France, together with Spain, the Mediterranean, and Adriatic. Changeable and unsettled over northern Europe, with rain at Riga and Moscow; slight showers at Valencia. Rain later at our western stations generally (0·5 in. at Valencia), and smaller quantities over Germany and Austria—heavy dew and wet fog over the south and east of England, snow showers over Russia.

Temperature changing little and irregularly over western Europe, falling fast in the far north. Morning readings exceeding 50° at Malta, some Algerian stations, and Brest only; exceeding 40° on the western and southern coasts of our Islands, the north-west and north of France, and the west of Norway. Lowest, (1) 7° at Archangel, 19° at Haparanda, 28° at Helsingfors; (2) 28° to 33° over the south of Russia; (3) 28° at Limoges, 33° at Turin; (4) 33° at Cambridge, 36° at Yarmouth, Loughborough, and Oxford. Rising later to between 50° and 53° on our west and south coasts, 57° at Brest, to 62° at Lorient, and to much above 60° over Algeria and the south of Italy; not quite touching 60° in the Riviera.

Barometer and Wind. 8 a.m. 6 p.m.

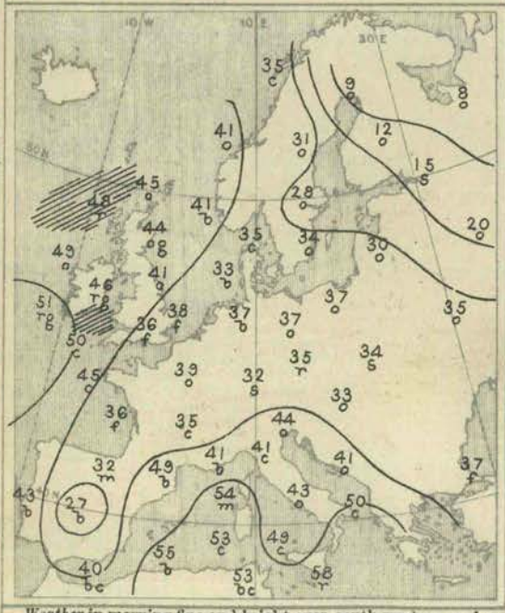


Wind light and anticyclonic over France; Westerly to Southerly over the United Kingdom, but moderate in force; North-Westerly on the eastern shores of the North Sea, Westerly over north Germany, variable but mainly Southerly over the Baltic and Gulf of Bothnia. Becoming strong to a gale in the extreme west and north-west of our Islands later, and veering to North-West over Germany, very little change elsewhere.

Barometer highest, 30·5 ins. and more to 30·3 ins. over France, Spain, the Bay of Biscay, and England. Lowest, 29·7 ins. and less over the north-west of Norway, 29·8 ins. and less over the southern parts of Sweden, and also over central Russia; below 30·2 ins. over Sardinia, Corsica, Italy, and the Riviera. Falling in the west of our Islands later, but rising decidedly over northern Europe. Swedish depression moving south-eastwards and filling up. New high-pressure area appearing over Finland and the northern part of the Gulf of Bothnia.

Wednesday, 27th December.

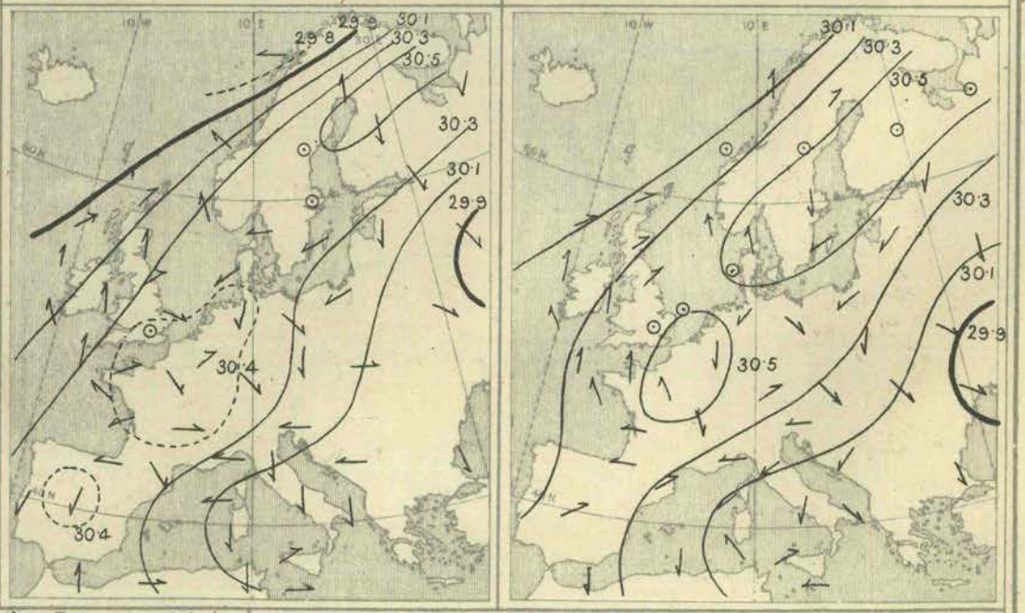
Temperature and Weather. 8 a.m.



Weather in morning fine and bright over south-western and southern Europe as a whole, but cloudy in places, bright over Denmark and the Netherlands, dull over Russia and south-eastern Europe; very foggy over the northern parts of France and the south-eastern half of England, rainy in Ireland, as well as at Cracow, snow falling at Munich and Lemberg. Rain falling at our western and northern stations later—in very large quanties at Valencia, slight snow showers over Russia and northern Europe, and a considerable fall of rain at Constantinople.

Temperature in morning, highest, 50° to 58° on the southern side of the Mediterranean, 50° to 51° on our extreme south-western coasts, and above 40° over all the western and northern parts of our Islands, as well as in the west of Norway. Lowest, 8° to 15° Fahr. over the north of Russia and Finland, 20° at Moscow, 29° at Kharkov, 30° at Riga; 27° at Madrid, 20° at Brussels; 36° at Dungeness and in London. Rising to 60° and more at many of the Mediterranean stations later, and to 50° and more on our extreme western and south-western coasts. Succeeding night cold over England.

Barometer and Wind. 8 a.m. 6 p.m.



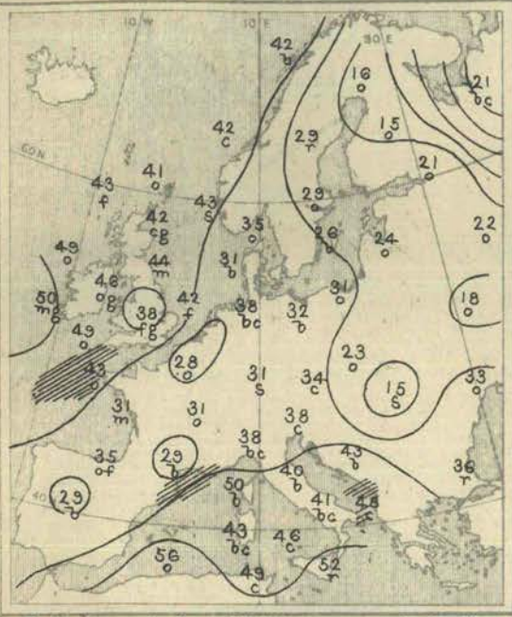
Wind extremely light to calm over Sweden, the North Sea, the Netherlands, the south-east of England, and the greater part of France and Spain; Easterly to Northerly, moderate to light, over the Mediterranean; Easterly over the Bay of Biscay, Southerly, fresh, over Ireland and Scotland, South-Easterly, moderate, in the west of Norway. Very light from North-West over Russia. Southerly wind becoming more general over our Islands later, and the North-Easterly wind freshening over Italy.

Barometer highest, 30·5 ins. and more to 30·3 ins. in a large and complex high-pressure band stretching from the Spanish Peninsula across France, the south-eastern half of England, and the North Sea to Sweden, Finland, and the Kola Peninsula. Lowest, below 29·9 ins. over central Russia, below 30·1 ins. over Italy and Sicily, below 29·9 ins. off the north-west of Scotland, and below 29·8 ins. over Finmark. Rising over our Islands and northern Europe all day, falling over Sicily and south-eastern Europe.

Thursday, 28th December.

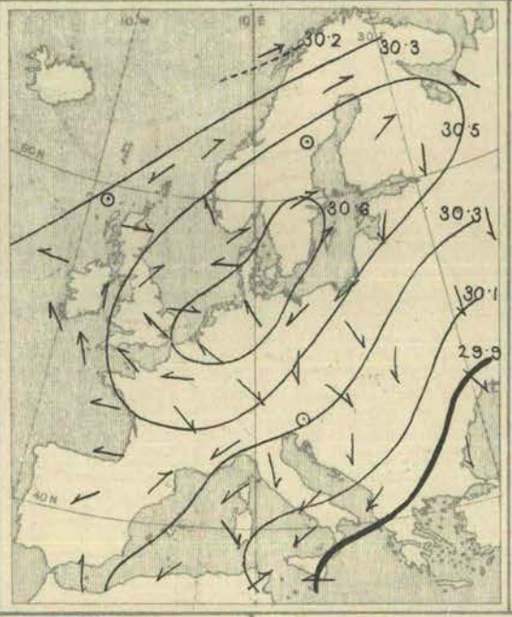
Temperature and Weather.

8 a.m.

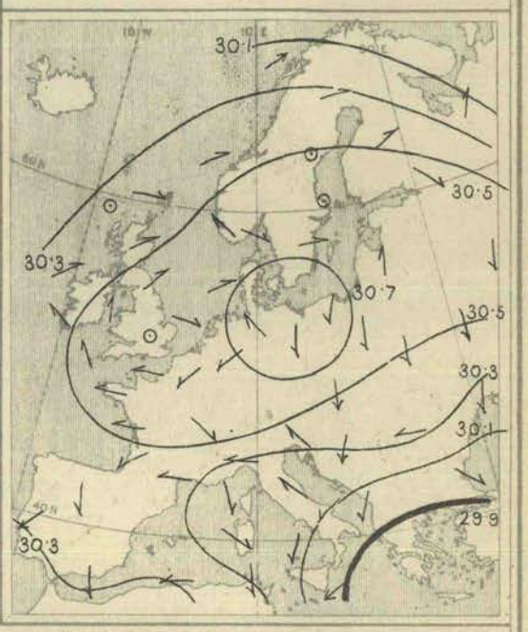


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning fine and bright over many parts of southern Europe and the Mediterranean, as well as in some parts of Germany, Denmark, and Scandinavia, dull generally elsewhere; very hazy or foggy in various parts of England and the Netherlands. Slight snow falling at Cracow and Odessa. A little rain later in several parts of Ireland and Scotland, but fall not general even in those countries; very foggy in London during day, and densely dark in afternoon.

Temperature fallen considerably over central and south-eastern Europe, and rapidly over the north of Russia. Highest, 56° at Algiers, 52° at Malta, 50° at Oran, also at Roche's Point and Valencia (Ireland); above 40° at most of our coast stations and in the west of Norway. Lowest, (1) – 21° Fahr. at Haparanda, + 15° at Kuopio; (2) 15° at Lemberg, 18° at Kiev, 20° at Cracow, 24° at Riga; (3) 28° at the Helder, Paris, and Belfort, 31° at Lyons. Rising later to between 50° and 53° on our extreme south-western coasts, but not exceeding 45° over our south-eastern and eastern counties, and failing to reach 40° over Germany.

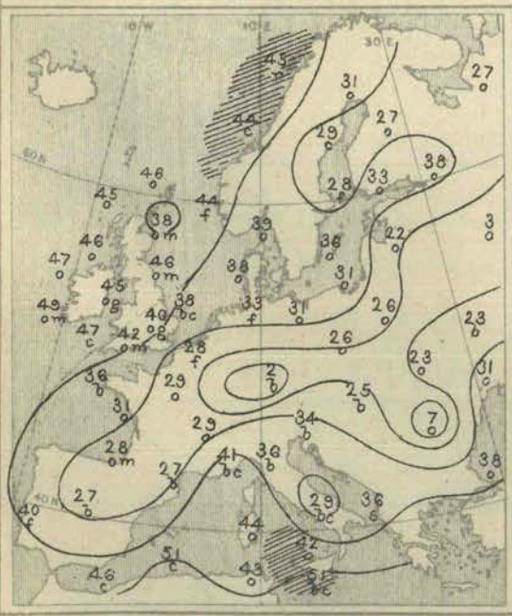
Wind very light to moderate generally, (1) Northerly but variable over south-eastern and southern Europe as a whole, Easterly over the south of Spain and France, South-Easterly over the Channel, Southerly over nearly the whole of the United Kingdom, South-Westerly over northern Europe. No important change in our Islands later.

Barometer highest, 30·6 ins. and more to 30·3 ins. in an anticyclone covering nearly the whole of western, northern, and a great deal of central Europe. Lowest, 28·9 ins. and less over the Black Sea and extreme south-east of Europe, and below 30·2 ins. over the western part of Lapland. Gradients moderate over the south-eastern countries, slight elsewhere. Rising throughout our Islands and north-western Europe during the day, but inclined to fall over Lapland at night.

Friday, 29th December.

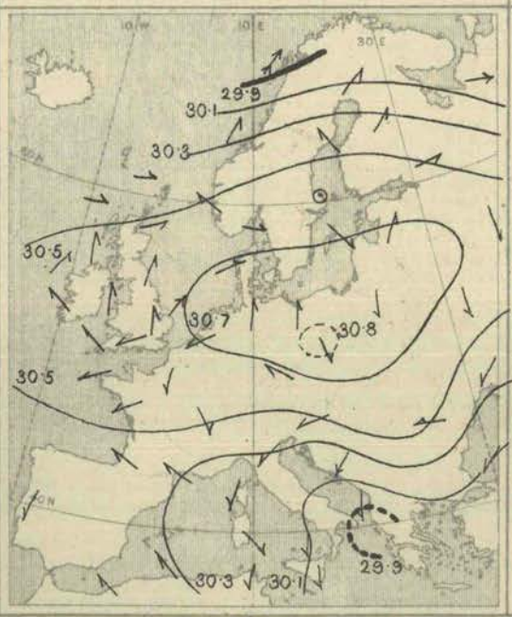
Temperature and Weather.

8 a.m.

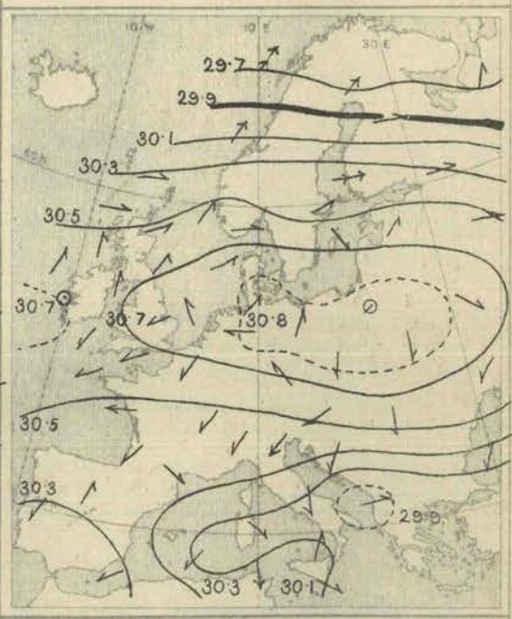


Barometer and Wind.

8 a.m.



6 p.m.



Weather in morning fine and bright over the Mediterranean, Italy, Austria, southern and western Germany, foggy over England, cloudy and somewhat unsettled over northern Europe, dull over Russia, Poland, and Hungary. Rain falling later over the northern half of Norway, very slight showers at some of our extreme north-western and western stations, and large quantities at Tunis and Constantinople. Fog very prevalent over England.

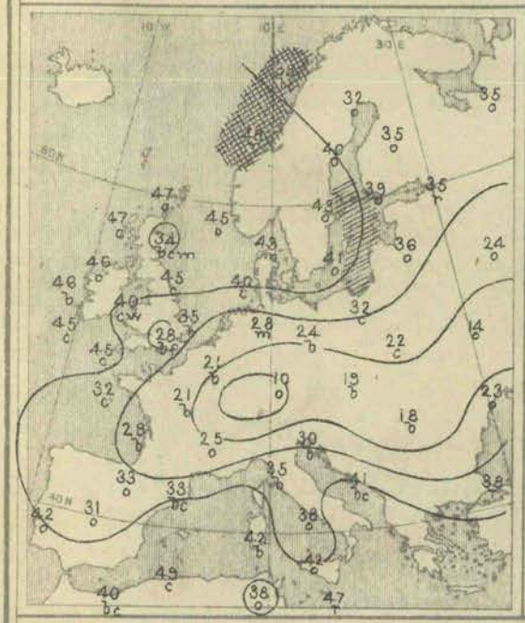
Temperature in morning, highest, 51° at Malta and Algiers, exceeding 40° at most of the Mediterranean stations; ranging from 45° to 49° on our own western coasts, and touching 46° at Stumburgh Head and 45° at Bodö. Lowest, (1) 3° Fahr. at Moscow, 21° at Kharkov, 22° at Riga, 27° at Archangel; (2) 2° at Munich, 7° at Hermanstadt, 23° at Lemberg and Vienna, 24° at Lyons and Paris. Rising later to 60° and more over Algeria, to 50° in the south of Italy and at Leith, 51° at Valencia, but failing to reach 40° over France and Germany; falling briskly over England towards night, rising decidedly over Scandinavia.

Wind South-Westerly to Westerly over the northern countries generally, Easterly to Northerly in the south—the latter blowing strongly over the Adriatic, Italy, and the Riviera, and the former blowing a gale at Bodö; nearly calm over central Europe and the inland parts of England. The South-Westerly wind increasing to a gale in several parts of Scandinavia and Finland later; no decided change in our Islands.

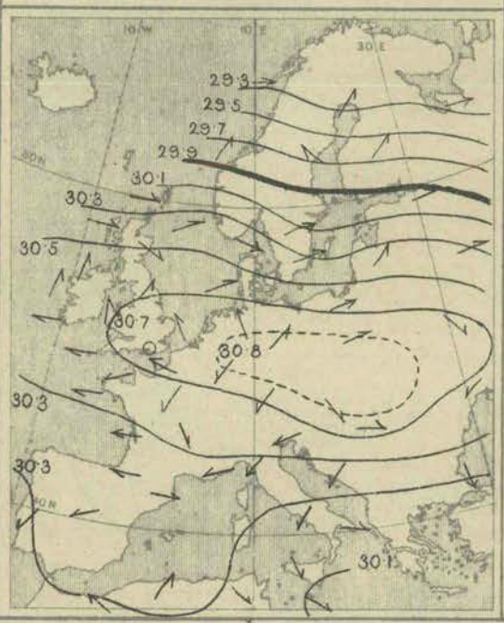
Barometer highest, 30·8 ins. to 30·6 ins. in a large anticyclone stretching across Ireland, England, the North Sea, and Germany to central Russia. Lowest, 29·9 ins. and less (1) over the west of Lapland and (2) over Greece and Adria. Gradients moderate both over south-eastern and northern Europe, very slight elsewhere. Rising slightly over our Islands later; falling slowly over the Peninsula, rapidly over northern Europe; large depression approaching northern Europe from the north-westward.

Saturday, 30th December.

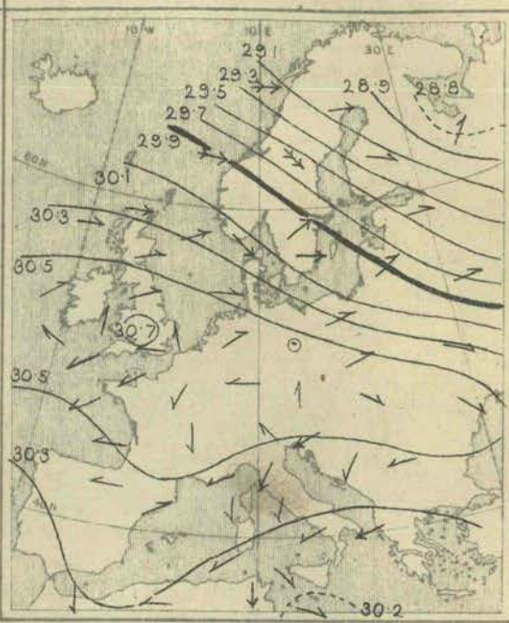
Temperature and Weather. 8 a.m.



Barometer and Wind. 8 a.m.



Barometer and Wind. 6 p.m.



Weather in morning fine over central, western, and southern Europe, fair in Ireland and Scotland, foggy over England; dull and unsettled over northern Europe, with rain in several places. Rain falling later over Norway and the extreme north of Scotland, and some showers (snow or rain) locally at several other Continental stations, heavy dew over England. Dense fog in London at night.

Temperature in morning below 50° at all stations. Highest, (1) 48° at Wick, 47° at Sumburgh Head, Nairn, and Ardrossan; (2) 49° at Algiers, 47° at Malta. Lowest, (1) 10° Fahr. at Munich and Kharkov, 14° at Kiev, 18° at Odessa, 21° at Belfort, Paris, and Brussels; (2) 24° at Cambridge and 28° in London. Falling fast over Scandinavia later, and fall beginning to reach Scotland. Night very cold over the southern half of England.

Wind Westerly to Southerly over all the northern half of Europe, and blowing a gale over Scandinavia and Finland; Easterly to Northerly over the southern countries, and blowing very strongly over the northern parts of the Adriatic and Italy; North-Westerly over Tunis and the south of Italy. Nearly calm over central Europe, the Netherlands, and England. Gale veering to North-West over northern Europe later, and blowing very hard at Christiansund.

Barometer highest, 30·8 ins. and more over central Europe, and exceeding 30·4 ins. in an anticyclone spreading thence across Holland, France, and England to Ireland, and eastwards as far as the south of Russia. Lowest, 29·3 ins. and less over Lapland and the north of Russia, and 30·1 ins. and less over Malta and the south-east of Sicily. Depression in far north moving south-eastwards later.

GENERAL NOTES.

In the course of this week an important change has occurred in the distribution of pressure, and consequently in the winds and weather experienced over Europe. At first pressure was highest over Spain and the central and southern countries, lowest in the north-west and north, but the depressions which appeared in the latter regions were of slighter intensity than those previously experienced, and their trajectores lay further to the north-westward than they had done. The high-pressure systems gradually became more firmly established; they increased in area also, and spread northwards and north-eastwards, until, towards the middle of the week, anticyclonic systems were the dominant systems of the Continent, while low-pressure areas began to appear over south-eastern Europe. Still later (on Friday) pressure was giving way in the far north, and, at the close of the week, when the anticyclonic centre lay over England, a depression of vast size appeared over northern Russia, moving in a south-easterly direction, while its secondaries began to spread over the North Sea and the United Kingdom. Thus, the week, which began with South-Westerly winds and mild weather over north-western and northern Europe, and North-Easterly to Northerly winds over the Mediterranean, closed with calms, light airs, fog, and frost in the north-west, Westerly gales, sleet, and cold rain in the north, and Easterly breezes and fair weather in the south. The tendency was then in favour of the approach of winds from a more Northerly point over Europe generally, and the approach of inclement weather.

BRIGHT SUNSHINE Values for the Week, in addition to those found on page 308.

STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.	STATIONS.	No. of Hours recorded.	Difference from the Mean for the Week.	Percentage of possible Duration.	Difference from Mean for the Week.
EDINBURGH	2·8	?	6	?	EASTBOURNE	17·2	?	32	?
OSWALDKIRK (Yorkshire)	7·0	?	14	?	TENBY	12·2*	?	23*	?
WORKSOP	6·7	− 0·8	13	− 1	NEWQUAY	17·5	?	32	?
THURCASTON (Leicestershire)	9·2	+ 3·2	18	+ 7	TORQUAY	11·6*	?	21*	?
MARGATE	17·3	?	32	?	ARLEY COTTAGE (County Cavan)	6·0	?	12	?
WESTBOURNE (Sussex)	17·0*	?	31*	?	GUERNSEY	28·2*	?	49*	?
BRIGHTON	18·8	?	35	?					

* The values at Westbourne, Tenby, Torquay and Guernsey are obtained by Jordan's Photographic Recorder.

REPORTS received too late for insertion in their proper places.

DATE OF REPORT.	NAMES OF STATIONS.	Temperature. (In Degrees Fahrenheit.) Highest observed.	Lowest observed.	Averages for the Week. Of Highest each day.	Of Lowest each day.	For whole of each day.	Difference of Daily Average from Mean for the Week.	Accumulated Heat for the Week (in Day-Degrees). Above 42° F.	Below 42° F.	Rainfall. Number of Rainy Days.	Rainfall in the Week.	Difference from the Mean for the Week.	Bright Sunshine. Number of Hours recorded.	Difference from Mean for the Week.	Percentage of possible duration.	Difference from the Mean for the Week.
		°	°	°	°	°	°	°	°		Inches.	Inches.				
Nov. 18th, 1893.	Scarborough	56	35	49·5	39·5	44·5	+1·5	28	7	5	1·28	+0·58	—	—	—	—
Dec. 9th, ,,	Scarborough	50	27	46·5	35·1	41·0	+1·0	13	29	5	0·30	−0·36	—	—	—	—
,, 23rd, ,,	Scarborough	50	34	45·4	36·8	41·3	+2·8	10	22	4	0·53	−0·09	—	—	—	—

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(OFFICIAL COPY.)

QUARTERLY SUMMARY OF THE WEEKLY WEATHER REPORT, 1893.

VOL. X. APPENDIX I.] *New Series.*

FIRST QUARTER—JANUARY TO MARCH.

[*Price 4d.*

TABLE I.—SUMMARY OF RAINFALL AND MEAN TEMPERATURE, FOR THE FIRST QUARTER OF THE TWENTY-EIGHT YEARS, 1866 TO 1893.

RAINFALL (in Inches).

YEARS.	Principal Wheat-producing Districts.												Principal Grazing, &c. Districts.										Channel Islands.		Means for the British Islands generally.	
	0. Scotland, N.		1. Scotland, E.		2. England, N.E.		3. England, E.		4. Midland Counties.		5. England, S.		Means for Wheat-producing Districts.		6. Scotland, W.		7. England, N.W.		8. England, S.W.		9. Ireland, N.		10. Ireland, S.		Means for the Grazing, &c. Districts.			
	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days	Inches.	Days.	Inches.	Days.	Inches.
Means for 5 years, 1866-70	—	12·6	—	9·6	—	5·4	—	5·7	—	6·9	—	8·5	—	7·2	—	12·6	—	11·8	—	13·7	—	11·8	—	11·0	—	12·2	—	—	—	9·7
Means for 5 years, 1871-75	—	9·1	—	7·8	—	4·9	—	4·4	—	6·6	—	7·1	—	6·2	—	11·1	—	10·4	—	13·7	—	9·5	—	10·5	—	11·0	—	—	—	8·6
Means for 5 years, 1876-80	—	9·5	—	7·2	—	5·3	—	5·7	—	6·2	—	7·2	—	6·3	—	11·2	—	9·5	—	9·9	—	9·2	—	10·0	—	10·0	—	—	—	8·2
1881	60	9·2	46	7·4	51	6·3	47	5·8	42	6·4	39	6·7	45	6·5	46	9·5	42	8·6	45	9·7	51	7·7	44	8·7	46	8·8	51	9·0	46	7·7
1882	72	10·3	48	5·2	32	3·1	32	4·3	35	5·6	34	3·6	36	4·4	62	11·9	49	7·8	49	7·1	63	8·3	69	9·7	57	9·0	48	5·8	47	6·7
1883	63	8·9	52	6·5	53	5·8	51	6·4	49	7·4	49	7·5	51	6·7	56	12·2	51	8·5	55	10·4	63	10·2	57	13·8	57	11·0	63	8·8	54	8·9
1884	66	12·1	52	6·4	44	6·2	42	3·9	47	6·7	48	6·7	46	6·0	68	17·1	57	11·5	62	12·2	70	12·2	72	15·4	66	13·7	59	9·2	56	9·9
1885	63	9·1	46	5·4	45	4·4	48	5·3	50	6·1	45	7·3	47	5·7	57	11·9	53	7·7	54	9·1	57	8·4	58	11·8	56	9·8	62	8·2	52	7·8
Means for 5 years, 1881-85	65	9·9	49	6·2	45	5·2	44	5·1	45	6·4	43	6·4	45	5·9	58	12·5	50	8·8	53	9·7	61	9·4	58	11·9	56	10·5	57	8·2	51	8·2
1886	70	9·5	55	5·9	56	6·3	54	4·9	49	6·5	48	6·3	53	6·0	57	11·2	54	9·0	57	10·8	58	10·0	55	11·2	56	10·4	68	8·9	55	8·2
1887	60	12·1	43	5·3	38	3·8	33	3·8	35	4·1	34	4·1	36	4·2	47	9·7	38	5·9	38	5·5	47	7·3	40	7·6	41	7·2	42	4·3	39	5·7
1888	62	10·2	55	6·9	49	5·6	50	5·1	43	4·6	46	5·8	49	5·6	41	8·6	51	5·0	48	7·1	47	7·2	41	7·6	46	7·1	61	7·3	48	6·4
1889	72	13·8	52	4·8	46	4·8	47	3·9	43	5·6	47	5·1	47	4·8	48	10·6	51	6·0	48	9·1	66	8·6	55	8·6	56	8·6	58	6·7	52	6·7
1890	67	15·2	54	8·1	48	5·3	52	5·6	46	5·1	46	5·6	49	5·9	60	13·6	56	8·4	53	8·9	62	8·7	58	12·7	58	10·5	54	8·3	54	8·2
Means for 5 years, 1886-90	66	12·2	52	6·2	47	5·2	47	4·7	43	5·2	44	5·4	47	5·3	53	10·7	50	6·9	49	8·3	56	8·4	50	9·5	52	8·8	57	7·1	50	7·1
1891	65	14·7	38	5·1	43	3·7	43	3·8	37	4·1	38	5·8	40	4·5	47	9·2	35	4·4	38	6·8	49	5·5	42	5·6	42	6·3	43	6·2	41	5·4
1892	63	11·2	46	5·5	47	4·4	49	4·0	44	4·0	38	3·7	45	4·3	47	8·0	46	6·3	47	6·4	49	5·9	45	7·6	47	6·8	52	6·9	47	5·6
1893	65	12·8	51	5·9	44	4·5	49	5·2	48	5·0	48	5·9	48	5·3	57	10·0	49	6·4	49	8·7	59	7·8	50	8·7	53	8·3	56	7·3	52	6·8
Means for 28 years, 1866-93	—	10·9	—	7·2	—	5·1	—	5·0	—	6·1	—	6·7	—	6·0	—	11·4	—	9·1	—	10·7	—	9·3	—	10·2	—	10·1	—	—	—	8·1

MEAN TEMPERATURE (in Degrees Fahrenheit).

YEARS.	Principal Wheat-producing Districts.							Principal Grazing, &c. Districts.							Channel Islands.	British Islands generally.
	0. Scotland, N.	1. Scotland, E.	2. England, N.E.	3. England, E.	4. Midland Counties.	5. England, S.	Means for Wheat-producing Districts.	6. Scotland, W.	7. England, N.W.	8. England, S.W.	9. Ireland, N.	10. Ireland, S.	Means for the Grazing, &c. Districts.			
	Degrees.	Degrees.	Degrees.	Degrees.	Degrees.	Degrees.	Degrees.	Degrees.	Degrees.	Degrees.	Degrees.	Degrees.	Degrees.		Degrees.	Degrees.
Means for 5 years, 1866-70	38°·8	39°·1	38°·9	39°·9	39°·9	40°·7	39°·7	40°·1	40°·5	43°·1	40°·6	42°·1	41°·3		—	40°·5
Means for 5 years, 1871-75	40·2	40·0	39·7	39·9	40·5	41·2	40·3	40·8	41·6	44·0	41·6	43·7	42·3		—	41·3
Means for 5 years, 1876-80	38·6	38·2	39·2	39·4	39·8	40·6	39·4	39·9	40·2	43·2	40·8	43·6	41·5		—	40·5
1881	34·4	33·5	34·3	36·1	35·8	38·2	35·6	35·3	36·6	39·9	37·5	39·8	37·8		44·5	36·7
1882	41·8	42·9	42·8	42·1	42·6	43·5	42·8	43·7	43·5	44·9	44·8	46·0	44·6		44·7	43·7
1883	38·7	38·8	38·8	39·0	39·2	40·8	39·3	40·2	40·1	42·2	40·9	42·5	41·2		44·8	40·3
1884	40·7	41·2	41·9	42·4	42·6	43·8	42·4	42·4	42·4	44·5	42·7	44·8	43·4		46·5	42·9
1885	38·4	38·3	39·2	39·2	39·3	40·7	39·3	39·6	39·7	41·9	40·6	42·2	40·8		43·9	40·1
Means for 5 years, 1881-85	38·8	38·9	39·4	39·8	39·9	41·4	39·9	40·2	40·5	42·7	41·3	43·1	41·6		44·9	44·8
1886	36·5	36·1	76·2	35·6	36·0	37·2	36·2	37·2	36·9	38·4	38·6	40·0	38·2		42·0	37·2
1887	39·4	39·2	38·7	37·5	37·8	38·7	38·4	39·8	39·0	40·4	41·3	42·3	40·6		42·7	39·5
1888	36·2	36·3	37·3	36·5	36·8	37·4	36·9	38·1	37·7	38·5	39·4	40·5	38·8		41·6	37·9
1889	38·5	38·6	38·6	37·5	38·2	39·0	38·4	40·1	39·7	40·8	41·3	42·9	41·0		44·1	39·7
1890	40·0	39·8	40·7	40·1	40·4	41·6	40·5	41·3	41·2	42·7	42·0	43·5	42·1		45·7	41·3
Means for 5 years, 1886-90	38·1	38·0	38·3	37·4	37·8	38·8	38·1	39·3	38·9	40·2	40·5	41·8	40·1		43·2	39·1
1891	38·4	38·0	37·9	37·4	38·0	38·4	37·9	39·6	39·5	40·2	40·8	42·3	40 5		43·1	39·2
1892	36·3	36·1	36·9	36·3	36·6	38·3	36·8	37·9	37·9	39·7	39·2	40·3	39·0		43·0	37·9
1893	38·8	38·8	40·2	39·8	40·3	41·3	40·1	40·7	41·2	42·8	42·2	43·8	42·1		46·0	41·1
Means for 28 years, 1866-93	38·8	38·7	39·0	39·1	39·4	40·4	39·3	40·0	40·1	42·4	40·9	42·8	41·2		—	40·3

TABLE Ia.—SHOWING THE DATES OF THE DRIEST AND WETTEST, AND OF THE COLDEST AND WARMEST CORRESPONDING QUARTERS FOR THE TWENTY-EIGHT YEARS, 1866 TO 1893.

		Wheat Districts.	Grazing, &c. Districts.	Generally.
Rainfall	Driest	Ins. 4·2 in 1880 and 1887.	Ins. 6·3 in 1891	Ins. 5·4 in 1891
	Wettest	9·0 in 1872	14·9 in 1872	12·0 in 1872
Temperature	Coldest	35°·6 in 1881	37°·8 in 1881	36°·7 in 1881
	Warmest	42·8 in 1882	44·6 in 1882	43·7 in 1882

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TABLE II.—SHOWING THE RAINFALL, ACCUMULATED TEMPERATURE, AND BRIGHT SUNSHINE FOR EACH MONTH, AND THE PROGRESSIVE VALUES FROM THE COMMENCEMENT OF THE YEAR, FOR THE FIRST QUARTER, 1893.

YEAR AND MONTHS.	Principal Wheat-producing Districts.														Principal Grazing, &c. Districts.														Channel Islands.		Means for the British Islands generally.	
	0. Scotland, N.		1. Scotland, E.		2. England, N.E.		3. England, E.		4. Midland Counties.		5. England, S.		Means for Wheat-producing Districts.		6. Scotland, W.		7. England, N.W.		8. England, S.W.		9. Ireland, N.		10. Ireland, S.		Means for the &c. Grazing, Districts.						
	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.
RAINFALL.—NUMBERS OF DAYS WITH RAIN.																														
January	22	22	20	20	16	16	20	20	16	16	16	16	18	18	17	17	16	16	16	16	20	20	16	16	17	17	19	19	18	18
February	21	43	19	39	18	34	20	40	22	38	22	38	20	38	23	40	22	38	22	38	22	42	24	40	23	40	25	44	22	40
March	22	65	12	51	10	44	9	49	10	48	10	48	10	48	17	57	11	49	11	49	17	59	10	50	13	53	12	56	12	52
RAINFALL.—AMOUNTS IN INCHES.																														
January	4·12	4·12	1·78	1·78	1·20	1·20	1·79	1·79	1·41	1·41	1·67	1·67	1·57	1·57	1·91	1·91	1·19	1·19	2·30	2·30	2·26	2·26	3·03	3·03	2·12	2·12	2·53	2·53	1·85	1·85
February	4·91	9·03	2·76	4·54	2·00	3·20	2·43	4·22	2·89	4·30	3·05	4·72	2·63	4·20	5·62	7·53	3·67	4·77	5·20	7·50	3·77	6·03	4·66	7·69	4·58	6·70	3·44	5·97	3·61	5·46
March	3·77	12·80	1·31	5·85	1·34	4·54	0·95	5·17	0·70	5·00	1·13	5·85	1·09	5·29	2·48	10·01	1·67	6·44	1·15	8·65	1·81	7·84	1·03	8·72	1·63	8·33	1·32	7·29	1·36	6·82
ACCUMULATED HEAT.—DAY DEGREES ABOVE 42° F.																														
January	14	14	16	16	13	13	10	10	15	15	11	11	13	13	31	31	22	22	32	32	41	41	37	57	37	37	60	60	25	25
February	31	45	27	43	35	48	43	56	58	73	74	85	48	61	48	79	59	81	91	123	70	111	103	160	74	111	127	187	61	86
March	108	153	149	192	177	225	237	291	254	327	217	302	207	268	138	217	166	247	205	328	153	264	193	353	171	282	249	436	189	275
ACCUMULATED HEAT.—DAY DEGREES BELOW 42° F.																														
January	206	206	213	213	195	195	257	257	243	243	227	227	227	227	162	162	170	170	152	152	116	116	96	96	119	139	68	68	183	183
February	110	316	134	347	99	294	112	369	95	338	61	288	100	327	70	232	65	235	39	191	66	182	40	136	56	195	2	70	78	261
March	121	437	143	490	94	388	108	477	113	451	65	353	105	432	95	327	64	299	43	234	60	242	27	163	58	253	0	70	82	343
BRIGHT SUNSHINE.—NUMBERS OF HOURS.																														
January	27	27	26	26	30	30	36	36	37	37	30	30	32	32	40	40	27	27	54	54	30	30	34	34	37	37	41	41	35	35
February	48	75	61	87	56	86	58	94	55	92	62	92	58	90	49	89	44	71	63	117	61	91	64	98	56	93	80	121	57	92
March	101	176	169	256	180	266	214	308	203	295	216	308	193	286	153	242	166	237	213	330	124	215	146	244	160	253	248	369	178	270
BRIGHT SUNSHINE.—PERCENTAGES OF POSSIBLE DURATION.																														
January	14	16	13	10	14	16	16	16	16	17	13	16	14	15	19	21	13	15	23	23	13	16	16	15	17	18	17	17	16	17
February	19	15	24	18	22	17	22	19	21	19	23	17	22	18	19	20	17	15	24	24	24	17	24	19	22	19	29	21	22	19
March	24	18	41	24	43	24	51	29	49	26	52	25	47	25	37	24	40	21	51	29	31	21	35	24	39	24	60	31	43	25

1893.

EXPLANATION OF TABLES.

TABLES I. and IA. are merely in continuation of the Tables given in the Quarterly Summaries of the Weekly Weather Reports, 1884-92. The whole of the values for 1878-93, however, have been corrected by information received since they were first published.

TABLE II. In this Table the monthly values for *January* are those for the first four weeks in the year; those for *February* are for the fifth to the eighth weeks; those for *March* are for the ninth to the thirteenth weeks.

The figures given in the columns headed "From Jan. 1" are the values for the whole period elapsed since the beginning of the first week of the year.

In the "Means for the Wheat Districts" the values for District 0, and in the "Means for the "Grazing, &c. Districts" the values for the "Channel Islands," are not included.

The Means for the British Islands generally are those for the Wheat Districts and Grazing Districts combined.

(OFFICIAL COPY.)

QUARTERLY SUMMARY OF THE WEEKLY WEATHER REPORT, 1893.

VOL. X. APPENDIX I.] *New Series.*

SECOND QUARTER—APRIL TO JUNE.

[*Price 4d.*

TABLE I.—SUMMARY OF RAINFALL AND MEAN TEMPERATURE, FOR THE SECOND QUARTER OF THE TWENTY-EIGHT YEARS, 1866 TO 1893.

	YEARS.	Principal Wheat-producing Districts.												Principal Grazing, &c. Districts.												Channel Islands.		Means for the British Islands generally.	
		0. Scotland, N.		1. Scotland, E.		2. England, N.E.		3. England, E.		4. Midland Counties.		5. England, S.		Means for Wheat-producing Districts.		6. Scotland, W.		7. England, N.W.		8. England, S.W.		9. Ireland, N.		10. Ireland, S.		Means for the Grazing, &c. Districts.					
		Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.
RAINFALL (in Inches).	Means for 5 years, 1866-70	—	8·8	—	5·7	—	5·5	—	4·5	—	5·3	—	5·1	—	5·2	—	7·1	—	6·5	—	7·0	—	7·5	—	7·2	—	7·1	—	—	—	6·2
	Means for 5 years, 1871-75	—	8·5	—	6·5	—	5·5	—	5·5	—	6·4	—	6·4	—	6·1	—	7·3	—	7·4	—	7·9	—	7·5	—	6·2	—	7·3	—	—	—	6·7
	Means for 5 years, 1876-80	—	6·3	—	6·9	—	7·1	—	7·2	—	7·7	—	7·1	—	7·2	—	8·5	—	7·8	—	9·0	—	8·3	—	9·8	—	8·7	—	—	—	8·0
	1881	49	7·0	45	5·6	41	4·5	35	4·3	37	4·3	33	4·2	38	4·6	49	9·3	44	8·6	42	6·1	55	8·5	48	8·3	47	8·2	41	4·6	43	6·4
	1882	51	7·4	51	7·4	47	9·2	48	8·0	49	9·9	47	7·9	48	8·5	51	10·5	51	10·6	55	10·2	60	9·4	56	10·3	55	10·2	49	6·6	52	9·3
	1883	48	5·7	40	3·8	39	6·0	36	6·7	39	7·2	36	5·1	38	5·8	45	7·8	38	5·9	42	6·1	52	6·2	44	7·6	44	6·7	42	5·9	41	6·2
	1884	48	6·4	39	3·6	39	3·2	33	3·8	32	4·2	31	4·7	35	3·9	40	5·4	32	3·8	32	4·9	42	5·8	38	4·6	37	4·9	42	4·9	37	4·4
	1885	61	6·8	46	5·5	48	6·1	43	6·5	48	6·8	43	6·0	46	6·2	48	7·3	45	6·0	50	8·7	50	6·1	46	7·8	48	7·2	50	6·0	47	6·7
	Means for 5 years, 1881-85	51	6·7	44	5·2	43	5·8	39	5·9	41	6·5	38	5·6	41	5·8	47	8·1	42	7·0	44	7·2	52	7·2	46	7·7	46	7·4	45	5·6	44	6·6
	1886	59	6·7	46	6·4	46	6·1	43	5·2	50	9·4	45	6·4	46	6·7	48	8·8	49	9·4	46	7·3	50	7·9	50	8·2	49	8·3	50	6·2	48	7·5
	1887	45	6·2	32	3·7	33	3·0	35	3·6	31	4·0	31	3·8	32	3·6	34	5·8	27	3·8	29	3·5	29	4·5	26	3·3	29	4·2	35	3·8	31	3·9
	1888	56	8·5	44	7·1	43	5·1	43	5·1	41	6·0	42	6·2	43	5·9	49	11·4	43	6·4	46	7·5	50	9·8	49	10·1	47	9·0	50	6·6	45	7·5
	1889	50	4·9	42	5·8	39	5·0	43	7·3	41	8·1	41	5·7	41	6·4	44	7·7	40	6·8	40	5·9	45	7·2	46	7·6	43	7·0	39	5·3	42	6·7
	1890	58	8·5	52	5·6	41	4·7	41	4·5	40	4·7	42	6·3	43	5·2	50	10·1	45	6·0	51	8·1	54	6·3	58	8·5	52	7·8	55	7·7	48	6·5
	Means for 5 years, 1886-90	54	7·0	43	5·7	40	4·8	41	5·1	41	6·4	40	5·7	41	5·5	45	8·8	41	6·5	42	6·5	46	7·1	46	7·5	44	7·3	46	5·9	43	6·4
	1891	45	6·3	36	4·4	35	4·3	41	5·5	43	6·7	38	4·8	39	5·1	36	5·0	39	5·9	42	7·2	46	6·1	45	8·4	42	6·5	41	6·2	41	5·8
	1892	59	9·1	51	6·4	51	7·3	42	6·1	38	5·5	31	3·7	43	5·8	49	10·0	50	8·3	37	4·6	53	9·6	46	8·0	47	8·1	37	4·8	45	7·0
	1893	41	5·2	36	5·1	28	3·2	22	2·3	23	3·1	20	1·7	26	3·1	30	5·4	27	4·2	21	3·0	33	4·9	30	4·8	28	4·5	17	2·1	27	3·8
	Means for 28 years, 1866-93	—	7·4	—	5·9	—	5·6	—	5·5	—	6·3	—	5·7	—	5·8	—	7·8	—	6·9	—	7·2	—	7·5	—	7·6	—	7·4	—	—	—	6·6
MEAN TEMPERATURE (in Degrees Fahrenheit).	Means for 5 years, 1866-70		48°·5		50°·4		49°·8		52°·7		53°·1		53°·1		51°·8		51°·3		51°·8		53°·9		52°·5		53°·0		52°·5		—		52°·2
	Means for 5 years, 1871-75		48°·2		49°·8		49°·6		51°·0		52°·0		52°·1		50°·9		51°·1		51°·3		53°·0		51°·6		53°·3		52°·1		—		51°·5
	Means for 5 years, 1876-80		47°·2		48°·9		49°·4		51°·1		51°·3		51°·9		50°·5		50°·2		50°·5		52°·0		50°·1		52°·0		51°·0		—		50°·8
	1881		46°·8		50°·1		50°·6		52°·6		52°·9		53°·5		51°·9		50°·8		51°·8		52°·5		51°·8		52°·8		51°·9		53°·4		51°·9
	1882		47°·5		49°·4		50°·4		52°·4		52°·2		53°·8		51°·6		50°·7		51°·8		52°·4		51°·2		52°·2		51°·7		53°·9		51°·7
	1883		47°·3		50°·1		50°·2		52°·1		52°·2		52°·9		51°·5		50°·0		51°·0		51°·7		50°·5		51°·5		50°·9		52°·6		51°·2
	1884		46°·8		49°·4		50°·0		51°·2		51°·4		52°·4		50°·9		50°·1		50°·6		51°·5		50°·6		51°·8		50°·9		52°·6		50°·9
	1885		45°·8		48°·6		49°·0		50°·5		50°·2		51°·8		50°·0		48°·3		49°·0		50°·0		48°·7		49°·6		49°·1		51°·1		49°·6
	Means for 5 years, 1881-85		46°·8		49°·5		50°·0		51°·8		51°·8		52°·9		51°·2		50°·0		50°·8		51°·6		50°·6		51°·6		50°·9		52°·7		51°·1
	1886		45°·6		47°·8		47°·9		50°·5		50°·5		52°·0		49°·7		48°·1		49°·4		51°·2		48°·9		50°·8		49°·7		52°·1		49°·7
	1887		48°·4		50°·5		50°·3		51°·4		52°·0		52°·4		51°·3		51°·0		51°·2		52°·6		52°·2		53°·3		52°·1		53°·2		51°·7
	1888		46°·5		47°·6		48°·4		50°·5		50°·5		51°·1		49°·6		49°·4		49°·9		50°·8		50°·0		51°·8		50°·4		51°·9		50°·0
	1889		49°·7		50°·9		51°·3		53°·1		53°·4		54°·7		52°·7		51°·9		52°·6		53°·0		51°·7		52°·4		52°·3		54°·0		52°·5
	1890		48°·0		49°·2		49°·8		51°·4		51°·2		52°·6		50°·8		50°·2		51°·0		52°·0		50°·9		52°·1		51°·2		52°·9		51°·0
	Means for 5 years, 1886-90		47°·6		49°·2		49°·5		51°·4		51°·5		52°·6		50°·8		50°·1		50°·8		51°·9		50°·7		52°·1		51°·1		52°·8		51°·0
	1891		47°·5		48°·2		48°·8		50°·7		50°·8		52°·3		50°·2		50°·1		50°·5		51°·5		50°·5		51°·7		50°·9		53°·0		50°·6
	1892		46°·8		48°·2		49°·6		51°·6		51°·6		52°·5		50°·7		49°·6		50°·8		51°·8		50°·6		52°·2		51°·0		53°·6		50°·9
	1893		51°·0		52°·0		52°·0		54°·2		55°·3		56°·3		54°·0		53°·6		54°·9		56°·5		54°·8		56°·1		55°·2		57°·6		54°·6
	Means for 28 years, 1866-93		47°·8		49°·6		49°·7		51°·7		52°·0		52°·6		51°·1		50°·6		51°·2		52°·6		51°·2		52°·5		51°·6		—		51°·4

TABLE Ia.—SHOWING THE DATES OF THE DRIEST AND WETTEST, AND OF THE COLDEST AND WARMEST CORRESPONDING QUARTERS FOR THE TWENTY-EIGHT YEARS, 1866 TO 1893.

		Wheat Districts.	Grazing, &c. Districts.	Generally.
Rainfall	Driest	Ins. 3·1 in 1870 and 1893	Ins. 4·2 in 1887	Ins. 3·8 in 1893
	Wettest	9·4 in 1879	10·3 in 1872 and 1878 10·2 in 1879 and 1882	9·8 in 1879
Temperature	Coldest	48°·4 in 1879	49°·1 in 1879 and 1885	48°·8 in 1879
	Warmest	54·0 in 1868 and 1893	55·2 in 1893	54·6 in 1893

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TABLE II.—SHOWING THE RAINFALL, ACCUMULATED TEMPERATURE, AND BRIGHT SUNSHINE FOR EACH MONTH, AND THE PROGRESSIVE VALUES FROM THE COMMENCEMENT OF THE YEAR, FOR THE SECOND QUARTER, 1893.

YEAR AND MONTHS.	Principal Wheat-producing Districts.														Principal Grazing, &c. Districts.														Channel Islands.		Means for the British Islands generally.	
	0. Scotland, N.		1. Scotland, E.		2. England, N.E.		3. England, E.		4. Midland Counties.		5. England, S.		Means for Wheat-producing Districts.		6. Scotland, W.		7. England, N.W.		8. England, S.W.		9. Ireland, N.		10. Ireland, S.		Means for the &c. Grazing, Districts.							
	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.
1893.																																
Rainfall.—Numbers of Days with Rain.																																
April	13	78	11	62	6	50	4	53	3	51	2	50	5	53	7	64	4	53	2	51	7	66	7	57	5	58	2	58	5	57		
May	14	92	11	73	9	59	6	59	9	60	7	57	8	61	13	77	12	65	10	61	12	78	11	68	12	70	9	67	10	67		
June	14	106	14	87	13	72	12	71	11	71	11	68	12	73	10	87	11	76	9	70	14	92	12	80	11	81	6	73	12	79		
Rainfall.—Amounts in Inches.																																
April	1·76	14·56	1·10	6·95	0·39	4·93	0·13	5·30	0·24	5·24	0·04	5·89	0·38	5·67	1·44	11·45	0·54	6·98	0·28	8·93	1·13	8·97	1·00	9·72	0·88	9·21	0·23	7·52	0·63	7·45		
May	1·95	16·51	1·08	8·03	1·29	6·22	0·80	6·10	1·67	6·91	0·73	6·62	1·11	6·78	2·43	13·88	1·68	8·66	1·52	10·45	1·59	10·56	1·84	11·56	1·81	11·02	1·21	8·73	1·46	8·91		
June	1·44	17·95	2·95	10·98	1·54	7·76	1·34	7·44	1·18	8·09	0·95	7·57	1·59	8·37	1·48	15·36	1·97	10·63	1·23	11·68	2·20	12·76	1·94	13·50	1·76	12·78	0·62	9·35	1·68	10·59		
Accumulated Heat.—Day Degrees above 42° F.																																
April	177	330	196	388	171	399	245	538	296	623	283	585	238	506	226	443	259	506	304	632	243	507	289	640	264	546	321	757	251	526		
May	243	573	275	663	282	681	338	876	353	976	385	970	327	853	305	748	340	846	371	1003	344	851	376	1016	347	893	394	1151	337	863		
June	431	1004	474	1137	491	1172	548	1424	579	1555	609	1579	540	1373	516	1264	568	1414	618	1621	557	1408	595	1611	571	1464	670	1821	556	1419		
Accumulated Heat.—Day Degrees below 42° F.																																
April	43	480	52	542	43	435	47	524	50	501	20	373	42	475	27	354	24	323	12	246	16	258	15	178	19	272	0	70	31	374		
May	5	485	6	548	1	436	0	524	4	505	0	373	2	477	0	354	0	323	0	246	0	258	0	178	0	272	0	70	1	375		
June	0	485	0	548	0	436	0	524	0	505	0	373	0	477	0	354	0	323	0	246	0	258	0	178	0	272	0	70	0	375		
Bright Sunshine.—Numbers of Hours.																																
April	144	320	152	408	200	466	234	542	227	522	246	554	212	498	202	444	206	445	253	583	163	378	203	447	205	459	268	637	209	480		
May	108	428	147	555	176	642	214	756	201	723	219	773	191	689	115	589	160	605	218	801	116	494	143	590	156	615	272	909	174	654		
June	186	614	213	768	210	852	266	1022	236	959	274	1047	240	929	267	856	253	858	333	1134	221	715	232	822	261	876	389	1298	251	905		
Bright Sunshine.—Percentages of possible Duration.																																
April	37	24	41	32	51	35	61	39	59	38	64	40	55	37	52	33	53	33	66	42	42	28	53	33	53	34	71	46	54	36		
May	24	26	33	32	40	37	50	44	47	42	52	45	44	40	33	35	37	36	51	47	27	29	33	35	36	36	65	53	40	38		
June	31	26	35	33	36	37	46	44	41	42	48	46	41	40	45	36	43	37	59	49	38	30	40	35	45	37	70	56	43	39		

EXPLANATION OF TABLES.

TABLES I. and IA. are merely in continuation of the Tables given in the Quarterly Summaries of the Weekly Weather Reports, 1884-92. The whole of the values for 1878-93, however, have been corrected by information received since they were first published.

TABLE II. In this Table the monthly values for *April* are those for the fourteenth to seventeenth weeks in the year; those for *May* are for the eighteenth to the twenty-first weeks; those for *June* are for the twenty-second to the twenty-sixth weeks of the year.

The figures given in the columns headed "From Jan. 1" are the values for the whole period elapsed since the beginning of the first week of the year.

In the "Means for the Wheat Districts" the values for District 0, and in the "Means for the "Grazing, &c. Districts" the values for the "Channel Islands," are not included.

The Means for the British Islands generally are those for the Wheat Districts and Grazing Districts combined.

(OFFICIAL COPY.)

QUARTERLY SUMMARY OF THE WEEKLY WEATHER REPORT, 1893.

VOL. X. APPENDIX I.] *New Series.*

THIRD QUARTER—JULY TO SEPTEMBER.

[*Price 4d.*

TABLE I.—SUMMARY OF RAINFALL AND MEAN TEMPERATURE, FOR THE THIRD QUARTER OF THE TWENTY-EIGHT YEARS, 1866 TO 1893.

	YEARS.	0. Scotland, N.		Principal Wheat-producing Districts.										Principal Grazing, &c. Districts.										Channel Islands.		Means for the British Islands generally.	
				1. Scotland, E.		2. England, N.E.		3. England, E.		4. Midland Counties.		5. England, S.		Means for Wheat-producing Districts.		6. Scotland, W.		7. England, N.W.		8. England, S.W.		9. Ireland, N.		10. Ireland, S.		Means for the Grazing, &c. Districts.					
		Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.
RAINFALL (in Inches).	Means for 5 years, 1866-70	—	10·6	—	8·8	—	6·3	—	6·1	—	7·4	—	7·3	—	7·2	—	10·9	—	9·9	—	10·1	—	9·8	—	8·6	—	9·8	—	—	—	8·6
	Means for 5 years, 1871-75	—	13·1	—	10·7	—	8·4	—	7·5	—	9·1	—	8·0	—	8·7	—	13·2	—	12·9	—	14·1	—	12·2	—	10·8	—	12·6	—	—	—	10·7
	Means for 5 years, 1876-80	—	9·0	—	8·9	—	9·2	—	9·0	—	10·1	—	8·7	—	9·2	—	11·7	—	12·3	—	11·6	—	11·1	—	10·7	—	11·5	—	—	—	10·4
	1881	49	6·5	50	9·1	51	10·3	51	8·5	47	8·3	47	8·2	49	8·9	55	10·4	50	11·0	49	9·4	63	8·6	55	10·3	54	9·9	51	7·8	52	9·4
	1882	60	8·2	57	8·0	56	6·9	48	7·0	55	8·1	49	7·2	53	7·4	57	12·3	55	11·5	57	13·2	65	11·5	59	11·1	59	11·9	59	8·1	56	9·7
	1883	59	8·5	57	10·1	51	8·3	52	8·1	50	8·9	49	6·7	52	8·4	54	12·2	51	9·8	58	10·1	61	11·4	57	12·8	56	11·3	62	9·3	54	9·9
	1884	53	7·8	48	6·3	35	5·3	38	7·4	40	6·2	44	5·9	41	6·2	55	12·3	48	9·0	52	8·6	59	10·2	48	7·1	52	9·4	52	7·1	47	7·8
	1885	59	8·1	45	6·0	36	5·7	36	6·2	35	5·9	33	5·1	37	5·8	46	11·6	43	7·8	42	8·8	51	9·9	46	9·9	46	9·6	45	5·7	42	7·7
	Means for 5 years, 1881-85	56	7·8	51	7·9	46	7·3	45	7·4	45	7·5	44	6·6	46	7·3	53	11·8	49	9·8	52	10·0	60	10·3	53	10·2	53	10·4	54	7·6	50	8·9
	1886	59	8·7	43	5·0	41	6·8	38	6·5	39	6·4	35	5·8	39	6·1	48	11·4	42	10·3	40	9·3	54	9·3	53	10·9	47	10·2	48	7·2	43	8·2
	1887	63	10·3	53	7·6	44	6·1	42	5·4	35	5·2	35	5·8	42	6·0	49	10·8	43	7·1	37	7·3	55	10·5	46	7·9	46	8·7	40	6·2	44	7·4
	1888	55	9·3	52	7·1	49	9·2	53	8·4	48	7·9	46	7·9	50	8·1	53	10·6	50	10·5	53	11·0	54	10·3	44	9·3	51	10·3	51	8·6	51	9·2
	1889	58	11·0	51	8·8	48	7·7	48	9·1	44	7·8	41	6·6	46	8·0	51	10·8	48	10·2	50	9·1	60	11·9	50	9·8	52	10·4	47	6·0	49	9·2
	1890	65	12·1	54	8·4	48	8·3	44	7·2	47	6·6	44	8·6	47	7·8	54	12·0	53	9·2	52	9·8	65	10·2	55	8·4	56	9·9	44	8·1	52	8·9
	Means for 5 years, 1886-90	60	10·3	51	7·4	46	7·6	45	7·3	43	6·8	40	6·9	45	7·2	51	11·1	47	9·5	46	9·3	58	10·4	50	9·3	50	9·9	46	7·2	48	8·6
	1891	71	15·9	59	11·7	51	8·8	51	8·5	52	7·9	52	9·0	53	9·2	62	14·9	55	13·8	56	12·9	66	11·3	56	11·0	59	12·8	51	9·7	56	11·0
	1892	66	15·0	51	8·3	44	6·6	40	8·2	46	7·5	44	8·4	45	7·8	53	15·5	53	12·1	51	10·0	62	12·0	53	13·2	54	12·5	43	7·2	50	10·2
	1893	70	15·7	55	8·1	49	6·8	45	5·9	43	6·0	43	7·0	47	6·8	53	11·3	54	10·4	47	9·9	60	11·2	52	8·7	53	10·3	51	9·8	50	8·6
	Means for 28 years, 1866-93	—	10·7	—	8·8	—	7·7	—	7·5	—	8·1	—	7·6	—	7·9	—	11·9	—	11·0	—	11·0	—	10·8	—	10·0	—	10·9	—	—	—	9·4
MEAN TEMPERATURE (in Degrees Fahrenheit).	Means for 5 years, 1866-70	54°·4		57°·1		57°·0		59°·7		59°·7		60°·1		58°·7		57°·9		59°·0		61°·0		58°·5		59°·5		59°·2		—		59°·0	
	Means for 5 years, 1871-75	54·5		56·7		57·5		59·7		59·6		60·0		58·7		57·7		58·5		60·4		57·2		58·8		58·5		—		58·6	
	Means for 5 years, 1876-80	54·1		56·4		57·6		59·6		59·3		60·3		58·6		57·2		58·1		59·9		56·8		59·0		58·2		—		58·4	
	1881	52·1		56·8		56·8		58·6		57·7		59·4		57·9		54·8		56·4		57·5		55·8		56·4		56·2		59·8		57·1	
	1882	54·2		56·6		57·7		58·2		57·1		58·8		57·7		56·0		56·8		57·4		55·9		56·2		56·5		58·9		57·1	
	1883	52·9		55·8		56·9		58·5		57·7		59·5		57·7		55·9		57·2		57·5		55·8		56·9		56·7		59·1		57·2	
	1884	54·5		57·5		59·1		61·8		60·7		62·4		60·3		58·2		59·6		60·5		57·9		59·0		59·0		61·7		59·7	
	1885	51·7		55·0		56·2		58·0		57·7		59·6		57·3		54·8		56·2		57·7		55·7		57·3		56·3		59·6		56·8	
	Means for 5 years, 1881-85	53·1		56·3		57·3		59·0		58·2		59·9		58·1		55·9		57·2		58·1		56·2		57·2		56·9		59·8		57·6	
	1886	52·4		56·1		58·1		60·2		59·7		61·3		59·1		55·8		57·7		59·4		56·5		58·2		57·5		61·0		58·3	
	1887	52·9		55·8		57·1		59·1		58·2		59·7		58·0		55·6		57·5		58·7		56·5		58·4		57·3		61·2		57·7	
	1888	51·7		53·2		54·4		57·1		55·8		58·0		55·7		54·2		55·4		56·7		55·0		56·2		55·5		58·9		55·6	
	1889	53·2		54·7		56·4		58·1		57·3		59·4		57·2		55·5		56·9		58·0		56·1		57·5		56·8		60·3		57·0	
	1890	53·8		55·7		57·7		58·8		58·1		59·8		58·0		56·1		57·5		58·1		56·5		57·6		57·2		59·2		57·6	
	Means for 5 years, 1886-90	52·8		55·1		56·7		58·7		57·9		59·6		57·6		55·4		57·0		58·2		56·1		57·6		56·9		60·1		57·3	
	1891	54·0		55·7		57·0		58·4		57·5		59·2		57·6		56·1		57·4		57·4		56·6		57·3		57·0		59·8		57·3	
	1892	52·1		53·5		55·4		57·6		56·5		59·2		56·4		54·4		56·2		57·6		55·1		57·0		56·1		60·6		56·3	
	1893	55·0		56·3		58·4		60·5		60·2		61·7		59·4		57·3		59·9		60·4		58·1		59·5		59·0		52·7		59·2	
	Means for 28 years, 1866-93	53·8		56·2		57·2		59·3		58·9		60·0		58·3		56·7		57·9		59·4		56·9		58·4		57·9		—		58·1	

TABLE Ia.—SHOWING THE DATES OF THE DRIEST AND WETTEST, AND OF THE COLDEST AND WARMEST CORRESPONDING QUARTERS FOR THE TWENTY-EIGHT YEARS, 1866 TO 1893.

		Wheat Districts.	Grazing, &c. Districts.	Generally.
Rainfall	Driest	Ins. 4·9 in 1870	Ins. 6·4 in 1870	Ins. 5·7 in 1870
	Wettest	10·6 in 1879	14·2 in 1872	12·4 in 1879
Temperature	Coldest	55°·7 in 1888	55°·5 in 1888	55°·6 in 1888
	Warmest	60·9 in 1868	60·8 in 1868	60·9 in 1868

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TABLE II.—SHOWING THE RAINFALL, ACCUMULATED TEMPERATURE, AND BRIGHT SUNSHINE FOR EACH MONTH, AND THE PROGRESSIVE VALUES FROM THE COMMENCEMENT OF THE YEAR, FOR THE THIRD QUARTER, 1893.

YEAR AND MONTHS.	0. Scotland, N.		Principal Wheat-producing Districts. 1. Scotland, E.		2. England, N.E.		3. England, E.		4. Midland Counties.		5. England, S.		Means for Wheat-producing Districts.		Principal Grazing, &c. Districts. 6. Scotland, W.		7. England, N.W.		8. England, S.W.		9. Ireland, N.		10. Ireland, S.		Means for the Grazing, &c. Districts.		Channel Islands.		Means for the British Islands generally.	
	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.
1893.																														
Rainfall.—Numbers of Days with Rain.																														
July - -	19	125	16	103	16	88	16	87	16	87	14	82	16	89	15	102	16	92	16	86	17	109	17	97	16	97	19	92	16	95
August -	23	148	19	122	16	104	14	101	13	100	13	95	15	104	17	119	16	108	13	99	21	130	19	116	17	114	11	103	16	111
September -	28	176	20	142	17	121	15	116	14	114	16	111	16	120	21	140	22	130	18	117	22	152	16	132	20	134	21	124	18	129
Rainfall.—Amounts in Inches.																														
July - -	3·70	21·65	2·49	13·47	2·91	10·67	2·69	10·13	2·85	10·94	3·19	10·76	2·83	11·20	3·76	19·12	3·05	13·68	4·70	16·38	3·44	16·20	2·33	15·86	3·46	16·24	3·22	12·57	3·15	13·74
August -	3·97	25·62	2·98	16·45	2·10	12·77	2·24	12·37	1·69	12·63	1·26	12·02	2·05	13·25	3·94	23·06	3·11	16·79	2·41	18·79	4·74	20·94	4·16	20·02	3·67	19·91	1·35	13·92	2·86	16·60
September -	8·03	33·65	2·59	19·04	1·78	14·55	0·94	13·31	1·50	14·13	2·53	14·55	1·87	15·12	3·55	26·61	4·24	21·03	2·78	21·57	3·00	23·94	2·22	22·24	3·16	23·07	5·18	19·10	2·52	19·12
Accumulated Heat.—Day Degrees above 42° F.																														
July - -	410	1414	421	1558	455	1627	541	1965	536	2091	566	2145	504	1877	455	1719	528	1941	538	2159	470	1877	514	2125	501	1965	574	2395	503	1922
August -	433	1847	486	2044	568	2195	613	2578	606	2697	637	2782	582	2459	498	2217	586	2527	586	2745	525	2402	575	2700	554	2519	653	3048	568	2490
September -	318	2165	363	2407	433	2628	476	3054	462	3159	545	3327	456	2915	397	2614	481	3008	511	3256	432	2834	468	3168	458	2977	628	3676	457	2947
Accumulated Heat.—Day Degrees below 42° F.																														
July - -	0	485	0	548	0	436	0	524	0	505	0	373	0	477	0	354	0	323	0	246	0	258	0	178	0	272	0	70	0	375
August -	0	485	0	548	0	436	0	524	0	505	0	373	0	477	0	354	0	323	0	246	0	258	0	178	0	272	0	70	0	375
September -	6	491	4	552	0	436	0	524	0	505	0	373	1	478	0	354	0	323	0	246	0	258	0	178	0	272	0	70	0	375
Bright Sunshine.—Numbers of Hours.																														
July - -	97	711	121	889	136	988	173	1195	152	1111	178	1225	152	1081	150	1006	154	1012	175	1309	154	869	139	961	154	1030	200	1498	153	1058
August -	97	808	159	1048	182	1170	203	1398	209	1320	225	1450	196	1277	171	1177	173	1185	209	1518	158	1027	166	1127	175	1205	290	1788	186	1244
September -	111	919	147	1195	166	1336	181	1579	181	1501	185	1635	172	1449	173	1350	151	1336	204	1722	141	1168	182	1309	170	1375	230	2018	171	1415
Bright Sunshine.—Percentages of possible Duration.																														
July - -	20	26	26	32	30	36	39	44	34	41	40	46	34	40	33	37	34	37	40	49	34	31	31	35	34	38	46	56	34	39
August -	23	25	38	32	44	36	50	44	51	41	56	46	48	40	41	37	42	37	52	48	38	32	41	35	43	38	72	57	46	39
September -	25	25	33	33	37	37	41	44	41	42	42	46	39	40	38	37	33	37	46	49	32	32	40	36	38	38	52	58	39	39

EXPLANATION OF TABLES.

TABLES I. and IA. are merely in continuation of the Tables given in the Quarterly Summaries of the Weekly Weather Reports, 1884-92. The whole of the values for 1878-93, however, have been corrected by information received since they were first published.

TABLE II. In this Table the monthly values for *July* are those for the twenty-seventh to the thirtieth weeks in the year; those for *August* are for the thirty-first to the thirty-fourth weeks; those for *September* are for the thirty-fifth to the thirty-ninth weeks,

The figures given in the columns headed "From Jan. 1" are the values for the whole period elapsed since the beginning of the first week of the year.

In the "Means for the Wheat Districts" the values for District 0, and in the "Means for the "Grazing, &c. Districts" the values for the "Channel Islands," are not included.

The Means for the British Islands generally are those for the Wheat Districts and Grazing Districts combined.

QUARTERLY SUMMARY OF THE WEEKLY WEATHER REPORT, 1893.

VOL. X. APPENDIX I. *New Series.* FOURTH QUARTER—OCTOBER TO DECEMBER. [*Price 4d.*

TABLE I.—SUMMARY OF RAINFALL AND MEAN TEMPERATURE, FOR THE FOURTH QUARTER OF THE TWENTY-EIGHT YEARS, 1866 TO 1893.

	YEARS.	0. Scotland, N.		Principal Wheat-producing Districts. 1. Scotland, E.		2. England, N.E.		3. England, E.		4. Midland Counties.		5. England, S.		Means for Wheat-producing Districts.		Principal Grazing, &c. Districts. 6. Scotland, W.		7. England, N.W.		8. England, S.W.		9. Ireland, N.		10. Ireland, S.		Means for the Graz-ing, &c. Districts.		Channel Islands.		Means for the British Islands generally.	
		Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.
RAINFALL (in Inches).	Means for 5 years, 1866–70	—	18·4	—	8·8	—	7·7	—	7·4	—	7·6	—	8·3	—	8·0	—	12·9	—	14·7	—	14·6	—	12·6	—	10·5	—	13·1	—	—	—	10·6
	Means for 5 years, 1871–75	—	17·2	—	10·4	—	7·7	—	7·2	—	7·9	—	9·9	—	8·6	—	13·1	—	13·3	—	16·3	—	11·1	—	12·1	—	13·2	—	—	—	10·9
	Means for 5 years, 1876–80	—	13·8	—	9·1	—	8·1	—	7·2	—	8·1	—	9·5	—	8·4	—	12·8	—	12·0	—	14·1	—	11·0	—	11·3	—	12·2	—	—	—	10·3
	1881	64	11·2	58	7·2	54	7·2	60	8·5	51	8·6	52	9·5	55	8·2	56	15·8	54	11·9	59	14·2	65	12·1	62	13·4	59	13·5	65	12·6	57	10·9
	1882	71	11·9	67	11·4	72	11·2	69	11·7	71	13·0	67	12·6	69	12·0	63	16·9	67	13·2	74	19·8	65	12·5	68	14·8	67	15·4	83	19·0	68	13·7
	1883	75	14·8	48	5·8	53	5·8	60	7·6	52	7·4	49	7·2	52	6·8	66	18·4	57	11·3	62	11·8	71	12·2	60	11·1	63	13·0	63	10·3	58	9·9
	1884	68	14·6	52	6·9	44	5·1	50	6·9	47	5·3	42	6·0	47	6·0	52	16·1	51	8·7	57	10·2	64	13·2	54	9·8	56	11·6	62	8·7	52	8·8
	1885	63	11·0	45	4·6	51	7·0	55	9·2	52	8·3	50	9·0	51	7·7	52	11·8	50	9·8	59	12·7	54	8·9	59	10·1	55	10·7	62	11·3	53	9·2
	Means for 5 years, 1881–85	68	12·7	54	7·2	55	7·3	59	8·8	55	8·6	52	8·9	55	8·2	58	15·8	56	11·0	62	13·7	64	11·8	61	11·8	60	12·8	67	12·4	58	10·5
	1886	75	14·3	60	7·8	56	10·0	58	9·5	64	10·9	67	14·4	61	10·5	65	16·8	69	14·3	75	19·1	71	15·5	69	16·0	70	16·3	85	16·3	66	13·4
	1887	73	13·0	55	7·8	59	7·7	56	6·3	47	5·9	50	7·8	53	7·1	51	12·4	55	8·1	55	12·0	57	10·0	47	9·7	53	10·4	64	11·9	53	8·8
	1888	69	15·9	57	9·3	46	5·7	42	5·6	43	8·4	50	8·6	48	7·5	57	16·8	56	10·1	61	14·0	60	10·4	63	13·8	61	13·0	66	10·2	55	10·3
	1889	65	12·3	52	6·6	49	6·6	51	6·0	47	5·3	46	8·2	49	6·5	58	13·3	58	9·4	59	11·8	61	10·8	59	11·6	58	11·4	66	12·2	54	9·0
	1890	74	19·3	62	10·8	56	6·7	46	5·4	49	5·6	48	4·9	52	6·7	60	17·1	56	11·4	62	11·3	65	13·6	58	11·8	60	13·0	63	8·9	56	9·9
	Means for 5 years, 1886–90	71	15·0	57	8·5	53	7·3	51	6·6	50	7·2	52	8·8	53	7·7	58	15·3	59	10·7	62	13·6	64	12·1	59	12·6	60	12·9	69	11·9	57	10·3
	1891	61	15·9	51	9·7	52	7·8	62	9·0	60	11·4	62	13·6	57	10·3	60	20·8	58	14·2	64	18·2	64	12·4	61	16·5	61	16·4	66	14·6	59	13·4
	1892	65	14·5	53	8·0	55	7·3	49	8·9	48	6·1	47	8·6	50	7·8	57	13·0	56	10·5	57	10·1	68	10·5	59	11·3	59	11·1	63	10·3	55	9·5
	1893	76	24·2	57	8·2	52	5·9	55	7·7	50	6·7	51	8·9	53	7·5	65	16·4	61	10·4	56	12·1	65	10·1	57	10·4	61	11·9	61	9·2	57	9·7
	Means for 28 years, 1866–93	—	15·7	—	8·8	—	7·6	—	7·6	—	7·9	—	9·2	—	8·2	—	14·3	—	12·3	—	14·4	—	11·6	—	11·8	—	12·9	—	—	—	10·6
MEAN TEMPERATURE (in Degrees Fahrenheit).	Means for 5 years, 1866–70	42°·1		42°·1		42°·5		43°·6		43°·4		44°·2		43°·2		43°·2		43°·8		47°·0		44°·0		45°·2		44°·6		—		43°·9	
	Means for 5 years, 1871–75	42·4		41·8		42·7		42·9		42·8		43·6		42·8		42·7		43·6		46·3		43·3		45·4		44·3		—		43·6	
	Means for 5 years, 1876–80	41·7		41·6		42·3		42·9		42·4		44·2		42·7		42·9		43·7		47·1		43·6		45·6		44·6		—		43·7	
	1881	43·2		43·0		43·2		43·5		43·2		45·2		43·6		44·3		44·5		47·7		44·3		46·8		45·5		49·3		44·6	
	1882	41·3		40·1		43·6		43·5		42·8		45·5		42·9		42·2		44·0		46·5		42·8		44·6		44·0		49·3		43·5	
	1883	42·4		43·0		43·8		44·2		43·8		45·6		44·1		44·3		45·0		46·9		44·6		46·5		45·5		49·5		44·8	
	1884	44·4		42·6		43·8		43·6		43·3		45·3		43·7		43·8		44·4		46·2		44·1		45·1		44·7		49·3		44·2	
	1885	41·5		41·5		42·6		42·3		41·9		44·0		42·5		42·9		42·7		45·0		43·7		45·1		43·9		48·3		43·2	
	Means for 5 years, 1881–85	42·6		42·0		43·4		43·4		43·0		45·1		43·4		43·5		44·1		46·5		43·9		45·6		44·7		49·1		44·1	
	1886	42·6		42·5		43·6		43·9		43·5		45·6		43·8		44·4		44·7		46·3		44·2		45·8		45·1		49·8		44·5	
	1887	39·2		39·4		40·3		40·2		39·9		41·7		40·3		40·7		41·3		42·7		41·8		42·8		41·9		46·5		41·1	
	1888	43·2		43·4		44·1		43·9		43·8		46·1		44·3		45·1		45·3		47·1		43·5		47·0		46·0		50·6		45·2	
	1889	43·1		42·2		43·1		43·0		42·7		44·9		43·2		44·4		44·1		45·8		45·0		46·2		45·1		49·1		44·2	
	1890	42·3		41·5		42·1		40·5		40·4		42·2		41·3		43·3		42·6		44·0		44·3		45·6		44·0		47·5		42·7	
	Means for 5 years, 1886–90	42·1		41·8		42·6		42·3		42·1		44·1		42·6		43·6		43·6		45·2		44·2		45·5		44·4		48·7		43·5	
	1891	42·0		40·8		42·3		43·6		42·5		45·6		43·0		43·4		43·7		45·9		43·3		44·8		44·2		49·4		43·6	
	1892	40·2		39·1		40·9		41·5		40·5		43·5		41·1		41·5		42·1		44·5		42·9		44·6		43·1		48·2		42·1	
	1893	41·9		42·0		44·0		43·9		43·4		45·3		43·7		44·1		45·3		46·0		44·0		45·5		45·0		49·4		44·4	
	Means for 28 years, 1866–93	42·1		41·7		42·7		43·0		42·7		44·3		42·9		43·2		43·8		46·3		43·8		45·4		44·5		—		43·7	

TABLE Ia.—SHOWING THE DATES OF THE DRIEST AND WETTEST, AND OF THE COLDEST AND WARMEST CORRESPONDING QUARTERS FOR THE TWENTY-EIGHT YEARS, 1866 TO 1893.

		Wheat Districts.	Grazing, &c. Districts.	Generally.
Rainfall	Driest	Ins. 3·4 in 1879	Ins. 5·0 in 1879	Ins. 4·2 in 1879
	Wettest	13·1 in 1872	18·6 in 1872	15·9 in 1872
Temperature	Coldest	40°·3 in 1887	41°·9 in 1887	41°·1 in 1887
	Warmest	45·6 in 1866	47·0 in 1866	46·3 in 1866

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TABLE II.—SHOWING THE RAINFALL, ACCUMULATED TEMPERATURE, AND BRIGHT SUNSHINE FOR EACH MONTH, AND THE PROGRESSIVE VALUES FROM THE COMMENCEMENT OF THE YEAR, FOR THE FOURTH QUARTER, 1893.

YEAR AND MONTHS.	0. Scotland, N.		Principal Wheat-producing Districts. 1. Scotland, E.		2. England, N.E.		3. England, E.		4. Midland Counties.		5. England, S.		Means for Wheat-producing Districts.		Principal Grazing, &c. Districts. 6. Scotland, W.		7. England, N.W.		8. England, S.W.		9. Ireland, N.		10. Ireland, S.		Means for the &c. Grazing, Districts.		Channel Islands.		Means for the British Islands generally.	
	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.	For the Month.	From Jan. 1.
Rainfall.—Numbers of Days with Rain.																														
October	26	202	15	157	11	132	18	134	14	128	18	129	15	135	22	162	18	148	20	137	21	173	19	151	20	154	21	145	18	147
November	18	220	18	175	22	154	17	151	15	143	13	142	17	152	13	175	17	165	14	151	15	188	14	165	15	169	18	163	16	163
December	32	252	24	199	19	173	20	171	21	164	20	162	21	173	30	205	26	191	22	173	29	217	24	189	26	195	22	185	24	187
Rainfall.—Amounts in Inches.																														
October	7·69	41·34	2·50	21·54	1·30	15·85	2·58	15·89	2·25	16·38	3·85	18·40	2·50	17·62	5·89	32·50	3·91	24·94	4·64	26·21	3·58	27·52	3·01	25·25	4·21	27·28	2·85	21·95	3·36	22·48
November	4·83	46·17	3·01	24·55	2·60	18·45	2·85	18·74	1·45	17·83	2·05	20·45	2·39	20·01	3·18	35·68	2·17	27·11	2·64	28·85	2·30	29·82	1·70	26·95	2·40	29·68	2·49	24·44	2·40	24·88
December	11·72	57·89	2·72	27·27	1·95	20·40	2·20	20·94	2·90	20·73	2·85	23·30	2·52	22·53	7·32	43·00	4·32	31·43	4·86	32·71	4·18	34·00	5·71	32·66	5·28	34·96	3·80	28·24	3·90	28·78
Accumulated Heat.—Day Degrees above 42° F.																														
October	160	2325	197	2604	228	2856	269	3323	244	3403	299	3626	247	3162	210	2824	270	3276	277	3533	205	3039	239	3407	240	3217	373	4049	244	3191
November	3	2328	13	2617	59	2915	70	3393	61	3464	82	3708	57	3219	42	2866	68	3344	87	3620	61	3100	85	3492	69	3286	152	4201	63	3254
December	67	2395	58	2675	58	2973	55	3448	66	3530	91	3799	66	3285	98	2964	106	3450	136	3756	87	3187	137	3629	113	3399	162	4363	90	3344
Accumulated Heat.—Day Degrees below 42° F.																														
October	4	495	20	572	4	440	2	526	5	510	0	373	6	484	5	359	0	323	0	246	10	268	6	184	4	276	0	70	5	380
November	127	622	128	700	88	528	109	635	124	634	75	448	105	589	112	471	68	391	62	308	94	362	73	257	82	358	9	79	94	474
December	112	734	137	837	124	652	160	795	162	796	111	559	139	728	68	539	68	459	54	362	78	440	57	314	65	423	2	81	102	576
Bright Sunshine.—Numbers of Hours.																														
October	38	957	95	1290	118	1454	118	1697	105	1606	112	1747	110	1559	86	1436	78	1414	97	1818	78	1246	90	1399	86	1461	124	2142	98	1513
November	27	984	49	1339	62	1516	75	1772	62	1668	68	1815	63	1622	69	1505	54	1468	81	1899	79	1325	72	1471	71	1532	70	2212	67	1580
December	9	993	34	1373	42	1558	59	1831	47	1715	60	1875	48	1670	36	1541	32	1500	65	1964	55	1380	61	1532	50	1582	75	2300	49	1629
Bright Sunshine.—Percentages of possible Duration.																														
October	13	25	33	33	40	37	39	44	36	42	38	46	37	40	30	37	26	37	32	48	28	32	31	37	29	38	41	56	33	39
November	12	24	21	33	25	37	30	43	25	41	27	45	26	40	29	37	22	36	32	47	33	32	29	36	29	38	22	55	28	39
December	4	23	14	31	16	36	22	42	18	40	22	43	18	38	14	36	12	35	24	45	21	32	23	35	19	37	31	53	19	38

1893.

EXPLANATION OF TABLES.

TABLES I. and IA. are merely in continuation of the Tables given in the Quarterly Summaries of the Weekly Weather Reports, 1884-92. The whole of the values for 1878-93, however, have been corrected by information received since they were first published.

TABLE II. In this Table the monthly values for *October* are those for the fortieth to the forty-third weeks in the year; those for *November* are for the forty-fourth to the forty-seventh weeks; those for *December* are for the forty-eighth to the fifty-second weeks.

The figures given in the columns headed "From Jan. 1" are the values for the whole period elapsed since the beginning of the first week of the year.

In the "Means for the Wheat Districts" the values for District 0, and in the "Means for the "Grazing, &c. Districts" the values for the "Channel Islands," are not included.

The Means for the British Islands generally are those for the Wheat Districts and Grazing Districts combined.

SUMMARY OF THE WEEKLY WEATHER REPORT, 1893.

VOL. X. APPENDIX I.] *New Series.* VALUES FOR THE WHOLE YEAR. [*Price 4d.*

TABLE I.—SUMMARY OF RAINFALL AND MEAN TEMPERATURE, FOR THE WHOLE YEAR DURING THE TWENTY-EIGHT YEARS, 1866 TO 1893.

RAINFALL (in inches).

YEARS.	0. Scotland, N.		Principal Wheat-producing Districts.										Principal Grazing, &c. Districts.										Channel Islands.		Means for the British Islands generally.	
			1. Scotland, E.		2. England, N.E.		3. England, E.		4. Midland Counties.		5. England, S.		Means for Wheat-producing Districts.		6. Scotland, W.		7. England, N.W.		8. England, S.W.		9. Ireland, N.		10. Ireland, S.		Means for the Grazing, &c. Districts.			
	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days.	Inches.	Days	Inches.	Days.	Inches.	Days.	Inches.
Means for 5 years, 1866–70	—	50·4	—	32·9	—	25·0	—	23·8	—	27·3	—	29·2	—	27·6	—	43·5	—	42·9	—	45·4	—	41·7	—	37·4	—	42·2	—	—	—	34·9
Means for 5 years, 1871–75	—	47·8	—	35·4	—	26·5	—	24·6	—	30·1	—	31·4	—	29·6	—	44·7	—	44·0	—	52·0	—	40·3	—	39·6	—	44·1	—	—	—	36·9
Means for 5 years, 1876–80	—	38·6	—	32·0	—	29·8	—	29·0	—	32·2	—	33·5	—	31·1	—	44·2	—	41·4	—	44·6	—	39·6	—	41·9	—	42·3	—	—	—	36·7
1881	222	33·8	199	29·3	197	28·2	193	27·0	177	27·7	171	28·6	187	28·2	206	45·0	190	40·1	195	39·3	234	36·9	209	40·7	206	40·4	208	33·9	197	34·3
1882	254	37·9	223	32·0	207	30·4	197	30·9	210	36·5	197	31·4	206	32·2	233	51·5	222	43·1	235	50·4	253	41·6	240	45·9	237	46·5	239	39·5	222	39·4
1883	247	37·9	197	26·3	196	25·9	199	28·9	190	30·8	183	26·5	193	27·7	221	50·6	197	35·4	217	38·5	247	40·0	218	45·3	230	42·0	230	34·5	207	34·9
1884	235	40·8	191	23·1	162	19·9	163	22·0	166	22·4	165	23·3	169	22·1	215	50·9	188	33·0	203	35·9	235	41·4	207	36·9	209	39·6	215	29·9	189	30·9
1885	246	35·0	182	21·5	180	23·2	182	27·2	185	27·4	171	27·4	180	25·3	203	42·6	191	31·3	205	39·3	212	33·3	209	39·6	204	37·2	219	31·2	192	31·3
Means for 5 years, 1881–85	241	37·1	198	26·4	188	25·5	187	27·2	186	29·0	177	27·4	187	27·1	216	48·1	198	36·6	211	40·7	236	38·8	217	41·7	216	41·1	222	33·8	202	34·1
1886	263	39·1	204	24·9	199	29·2	193	26·2	202	33·1	195	32·9	199	29·3	218	48·1	214	43·0	218	46·5	234	42·8	227	46·3	222	45·3	251	38·6	211	37·3
1887	241	41·6	183	24·4	174	20·6	166	19·1	148	19·2	150	21·5	164	21·0	181	38·7	163	24·9	159	28·3	188	32·3	159	28·5	170	30·5	181	26·2	167	25·8
1888	242	43·9	208	30·4	187	25·6	188	24·2	175	26·8	184	28·5	188	27·1	200	46·5	200	31·1	208	38·4	217	36·9	197	39·9	205	38·6	228	31·9	199	32·9
1889	245	42·0	197	26·0	182	24·1	189	26·3	175	26·8	175	25·6	185	25·8	211	42·4	197	32·4	197	35·9	232	38·5	210	37·6	209	37·4	210	30·2	200	31·6
1890	264	55·1	222	32·9	193	25·0	184	22·7	182	22·0	180	25·4	192	25·6	224	52·8	210	35·0	218	38·1	246	38·8	229	41·4	225	41·2	216	33·1	209	33·4
Means for 5 years, 1886–90	251	44·3	203	27·7	187	24·9	184	23·7	176	25·6	177	26·8	185	25·7	207	45·7	197	33·3	200	37·4	223	37·9	204	38·7	206	38·6	217	32·0	196	32·2
1891	242	52·8	184	30·9	181	24·6	197	26·8	192	30·1	190	33·2	188	29·1	205	49·9	186	38·3	200	45·1	225	35·3	204	41·5	203	42·0	201	36·7	197	35·6
1892	253	49·8	201	28·2	197	25·6	180	27·2	176	23·1	160	24·4	183	25·7	206	46·5	205	37·2	192	31·1	232	38·0	203	40·1	208	38·6	195	29·2	196	32·2
1893	252	57·9	199	27·3	173	20·4	171	21·1	164	20·8	162	23·5	174	22·6	205	43·1	191	31·4	173	33·7	217	34·0	189	32·6	195	35·0	185	28·4	185	28·8
Means for 28 years, 1866–93	—	44·7	—	30·7	—	26·0	—	25·6	—	28·4	—	29·2	—	28·0	—	45·4	—	39·2	—	43·2	—	39·2	—	39·7	—	41·3	—	—	—	34·7

MEAN TEMPERATURE (in Degrees Fahrenheit).

YEARS.	0. Scotland, N.	Principal Wheat-producing Districts.						Principal Grazing, &c. Districts.								Channel Islands.	Means for the British Islands generally.
		1. Scotland, E.	2. England, N.E.	3. England, E.	4. Midland Counties.	5. England, S.	Means for Wheat-producing Districts.	6. Scotland, W.	7. England, N.W.	8. England, S.W.	9. Ireland, N.	10. Ireland, S.	Means for the Grazing, &c. Districts.				
	°	°	°	°	°	°	°	°	°	°	°	°	°			°	°
Means for 5 years, 1866–70	45·9	47·2	47·1	49·0	49·1	49·5	48·4	48·1	48·8	51·3	48·9	50·0	49·4			—	48·9
Means for 5 years, 1871–75	46·3	47·1	47·4	48·4	48·8	49·3	48·2	48·1	48·6	50·9	48·4	50·3	49·3			—	48·8
Means for 5 years, 1876–80	45·4	46·3	47·1	48·3	48·2	49·3	47·8	47·6	48·1	50·6	47·9	50·1	48·9			—	48·4
1881	44·1	45·4	46·2	47·7	47·4	49·1	47·2	46·3	47·3	49·4	47·4	49·0	47·9			51·8	47·6
1882	46·2	47·3	48·4	49·1	48·7	50·4	48·8	48·2	49·0	50·3	48·7	49·8	49·2			51·7	49·0
1883	45·3	46·9	47·4	48·5	48·2	49·7	48·1	47·6	48·3	49·6	48·0	49·4	48·6			51·5	48·4
1884	46·6	47·7	48·7	49·8	49·5	51·0	49·3	48·6	49·3	50·7	48·8	50·2	49·5			52·5	49·4
1885	44·4	45·9	46·8	47·5	47·3	49·0	47·3	46·4	46·9	48·7	47·2	48·6	47·6			50·7	47·5
Means for 5 years, 1881–85	45·3	46·6	47·5	48·5	48·2	49·8	48·1	47·4	48·2	49·7	48·0	49·4	48·5			51·6	48·3
1886	44·3	45·6	46·4	47·5	47·4	49·0	47·2	46·3	47·1	48·8	47·0	48·7	47·6			51·2	47·4
1887	45·0	46·2	46·6	47·1	47·0	48·1	47·0	46·8	47·3	48·6	48·0	49·2	48·0			50·9	47·5
1888	44·4	45·1	46·1	47·0	46·7	48·2	46·6	46·7	47·1	48·3	47·5	48·9	47·7			50·8	47·2
1889	46·1	46·6	47·4	47·9	48·0	49·5	47·9	48·0	48·3	49·4	48·5	49·8	48·8			51·9	48·4
1890	46·0	46·6	47·6	47·7	47·5	49·1	47·7	47·7	48·1	49·2	48·4	49·7	48·6			51·3	48·2
Means for 5 years, 1886–90	45·2	46·1	46·8	47·4	47·3	48·8	47·3	47·1	47·6	48·9	47·9	49·3	48·2			51·2	47·8
1891	45·5	45·7	46·5	47·5	47·2	48·9	47·2	47·3	47·8	48·8	47·8	49·0	48·1			51·3	47·7
1892	43·9	44·2	45·7	46·8	46·3	48·4	46·3	45·9	46·8	48·4	47·0	48·5	47·3			51·4	46·8
1893	46·7	47·3	48·7	49·6	49·8	51·2	49·3	48·9	50·3	51·4	49·8	51·2	50·3			53·9	49·8
Means for 28 years, 1866–93	45·6	46·5	47·2	48·3	48·3	49·3	47·9	47·6	48·3	50·2	48·2	49·8	48·8			—	48·4

TABLE Ia.—SHOWING THE DATES OF THE DRIEST AND WETTEST, AND OF THE COLDEST AND WARMEST YEARS FOR THE TWENTY-EIGHT YEARS, 1866 TO 1893.

		Wheat Districts.	Grazing, &c. Districts.	Generally.
Rainfall	Driest	Ins. 21·0 in 1887	Ins. 30·5 in 1887	Ins 25·8 in 1887
	Wettest	40·2 in 1872	58·9 in 1872	49·1 in 1872
Temperature	Coldest	° 45·5 in 1879	° 46·9 in 1879	° 46·2 in 1879
	Warmest	50·1 in 1868	50·7 in 1868	50·4 in 1868

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NOTES.

1.—Rainfall.

The mean values for the Rainfall in the districts given as Table I. in the various Quarterly Summaries were obtained as follows. Those for the years 1866 to 1877 were derived from observations made at the following stations:—

Districts.	Stations.
0. SCOTLAND, N.	Loch Broom. Helmsdale. Sandwick Manse.
1. SCOTLAND, E.	Inverness. Aberdeen. Ballater. Logierait. Stirling. Hawick.
2. ENGLAND, N.E.	N. Shields. York. Grimsby. Boston.
3. ENGLAND, E.	1866 to 1875.: Fakenham. Beccles. Witham. Bury St. Edmunds. 1876 &1877.: Yarmouth. Cambridge. Bury St. Edmunds.
4. MIDLAND COUNTIES	Leicester Derby. Tenbury. Shiffnal. Cirencester. Banbury. Hitchin.
5. ENGLAND, S.	Bridport. Selborne. Maidstone. London (Camden Town).
6. SCOTLAND, W.	Dumfries. Ayr. Castle Toward.
7. ENGLAND, N.W., and N. WALES	Llandudno. Manchester. Skipton.
8. ENGLAND, S.W., and S. WALES	Barnstaple. Bodmin. Haverfordwest. Rhayader.
9. IRELAND, N.	Galway. Bunninadden, Co. Sligo. (Doo Castle.) Waringstown. Strabane.
10. IRELAND, S.	Cork. Waterford. Killaloe. Portarlington. Monkstown, Co. Dublin.

(The values were obtained mainly from Symons' Monthly Meteorological Magazine, supplemented by some of the values contained in the Reports of the Rainfall Committee of the British Association, 1868–1876.)

2.—Temperature.

The Temperature values for the years 1866 to 1877 have been obtained from the following stations:—

Districts.	Stations.
0. SCOTLAND, N.	Sandwick Manse. Stornoway. Dunrobin.
1. SCOTLAND, E.	Culloden. Aberdeen. Perth. Leith.
2. ENGLAND, N.E.	Bywell. N. Shields. Hull.
3. ENGLAND, E.	Royston. Holkham. Norwich. Wisbeach. Somerleyton.
4. MIDLAND COUNTIES	Derby. Nottingham. Cardington. Oxford.
5. ENGLAND, S.	Marlborough. Greenwich. Streatley. London (Camden Town). Weybridge. Strathfield Turgiss. Osborne. Bournemouth. Worthing.
6. SCOTLAND, W.	Greenock. Cockermouth. Silloth. Carlisle.
7. ENGLAND, N.W., and N. WALES	Stonyhurst. Bradford. Leeds. Eccles. Liverpool. Llandudno.
8. ENGLAND, S.W., and S. WALES	Gloucester. Taunton. Barnstaple. Truro. Helston.
9. IRELAND, N.	1866 to 1873.: Belfast. Milltown (Banbridge). Armagh.† Athlone.* 1874 to 1877.: Moville. Milltown. Armagh. Donaghadee.
10. IRELAND, S.	1866 to 1873.: Dublin.* Curragh Camp. Buttevant.* Cork. Valencia.† 1874 to 1877.: Kingstown. Parsonstown. Cork. Roche's Point. Valencia.

(The values were obtained mainly from the returns published quarterly by the Registrar General, by the Scottish Meteorological Society (in their Quarterly Journal), and the reports of the Army Medical Department, besides the records of the two Irish observatories, Valencia and Armagh. The returns for Cork were furnished by R. Caulfield, Esq., LL.D.)

For the years 1878 to 1893 the means are obtained from the observations published in the Weekly Weather Report.

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* Did not commence till January 1867.

† Did not commence till January 1869.

By Order,

ROBERT H. SCOTT, Secretary.

WEEKLY WEATHER REPORT, 1893.

VOL. X. APPENDIX II.] [*Price* 1*s*.
Third Series.

TABLE I.—SHOWING THE WEEKLY AND PROGRESSIVE NUMBERS OF RAINY DAYS IN EACH DISTRICT, DURING THE YEAR 1893.

DATE. — LIMITS OF WEEKS.	0. Scotland, N.		Principal Wheat-producing Districts.												Principal Grazing, &c. Districts.												Channel Islands.		Means for the British Islands generally.	
			1. Scotland, E.		2. England, N.E.		3. England, E.		4. Midland Counties.		5. England, S.		Means for Wheat producing Districts.		6. Scotland, W.		7. England, N.W.		8. England, S.W.		9. Ireland, N.		10. Ireland, S.		Means for Graz. &c. Districts.					
	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.
	Numbers of Days with Rain.																													
1893.																														
Jan. 1-7	4	4	5	5	5	5	5	5	3	3	2	2	4	4	4	4	4	4	2	2	4	4	4	4	4	4	4	4	4	4
8-14	4	8	4	9	5	10	5	10	4	7	6	8	5	9	2	6	2	6	4	6	4	8	3	7	3	7	5	9	4	8
15-21	7	15	6	15	4	14	5	15	5	12	4	12	5	14	5	11	5	11	4	10	6	14	4	11	5	12	4	13	5	13
22-28	7	22	5	20	2	16	5	20	4	16	4	16	4	18	6	17	5	16	6	16	6	20	5	16	5	17	6	19	5	18
Jan. 29-Feb. 4	6	28	4	24	4	20	5	25	6	22	5	21	5	23	6	23	5	21	4	20	6	26	6	22	5	22	5	24	5	23
Feb. 5-11	6	34	5	29	3	23	4	29	5	27	5	26	4	27	7	30	5	26	6	26	6	32	7	29	6	28	6	30	5	28
12-18	5	39	6	35	6	29	6	35	6	33	7	33	6	33	6	36	7	33	7	33	6	38	6	35	7	35	7	37	7	35
19-25	4	43	4	39	5	34	5	40	5	38	5	38	5	38	4	40	5	38	5	38	4	42	5	40	5	40	7	44	5	40
Feb. 26-Mar. 4	6	49	5	44	5	39	6	46	5	43	6	44	5	43	6	46	5	43	5	43	5	47	4	44	5	45	6	50	5	45
Mar. 5-11	6	55	2	46	1	40	0	46	1	44	1	45	1	44	4	50	2	45	1	44	3	50	2	46	3	48	1	51	2	47
12-18	6	61	4	50	3	43	3	49	3	47	3	48	3	47	5	55	3	48	4	48	6	56	3	49	4	52	4	55	4	51
19-25	1	62	0	50	0	43	0	49	0	47	0	48	0	47	0	55	0	48	0	48	1	57	0	49	0	52	0	55	0	51
Mar. 26-April 1	3	65	1	51	1	44	0	49	1	48	0	48	1	48	2	57	1	49	1	49	2	59	1	50	1	53	1	56	1	52
April 2-8	2	67	1	52	0	44	0	49	0	48	0	48	0	48	0	57	0	49	0	49	0	59	1	51	0	53	0	56	0	52
9-15	4	71	3	55	1	45	1	50	0	48	0	48	1	49	1	58	0	49	0	49	1	60	1	52	1	54	1	57	1	53
16-22	4	75	4	59	3	48	2	52	2	50	1	49	2	51	4	62	3	52	1	50	4	64	4	56	3	57	1	58	2	55
23-29	3	78	3	62	2	50	1	53	1	51	1	50	2	53	2	64	1	53	1	51	2	66	1	57	1	58	0	58	2	57
April 30-May 6	3	81	3	65	3	53	2	55	2	53	1	51	2	55	3	67	3	56	2	53	3	69	3	60	3	61	1	59	3	60
May 7-13	3	84	2	67	0	53	0	55	0	53	0	51	1	56	1	68	0	56	0	53	0	69	0	60	0	61	0	59	0	60
14-20	3	87	3	70	5	58	3	58	6	59	5	56	4	60	5	73	6	62	6	59	5	74	5	65	6	67	6	65	5	65
21-27	5	92	3	73	1	59	1	59	1	60	1	57	1	61	4	77	3	65	2	61	4	78	3	68	3	70	2	67	2	67
May 28-June 3	3	95	3	76	3	62	3	62	2	62	1	58	2	63	2	79	1	66	1	62	2	80	2	70	1	71	1	68	2	69
June 4-10	3	98	3	79	3	65	2	64	2	64	2	60	2	65	2	81	2	68	1	63	4	84	2	72	2	73	0	68	2	71
11-17	1	99	0	79	0	65	0	64	1	65	1	61	1	66	0	81	1	69	1	64	1	85	1	73	1	74	1	69	1	72
18-24	4	103	4	83	4	69	5	69	3	68	3	64	4	70	2	83	3	72	3	67	3	88	3	76	3	77	1	70	3	75
June 25-July 1	3	106	4	87	3	72	2	71	3	71	4	68	3	73	4	87	4	76	3	70	4	92	4	80	4	81	3	73	4	79
July 2-8	3	109	2	89	3	75	2	73	3	74	2	70	2	75	2	89	1	77	2	72	2	94	3	83	2	83	3	76	2	81
9-15	3	112	4	93	5	80	5	78	5	79	5	75	5	80	4	93	5	82	5	77	4	98	5	88	5	88	5	81	5	86
16-22	7	119	5	98	5	85	5	83	4	83	4	79	5	85	5	98	5	87	5	82	6	104	5	93	5	93	6	87	5	91
23-29	6	125	5	103	3	88	4	87	4	87	3	82	4	89	4	102	5	92	4	86	5	109	4	97	4	97	5	92	4	95
July 30-Aug. 5	6	131	6	109	6	94	6	93	5	92	5	87	6	95	4	106	5	97	4	90	6	115	6	103	5	102	4	96	6	101
Aug. 6-12	5	136	4	113	4	98	4	97	4	96	3	90	4	99	5	111	4	101	4	94	5	120	5	108	4	106	3	99	4	105
13-19	6	142	3	116	1	99	0	97	1	97	1	91	1	100	3	114	2	103	2	96	5	125	3	111	3	109	1	100	2	107
20-26	6	148	6	122	5	104	4	101	3	100	4	95	4	104	5	119	5	108	3	99	5	130	5	116	5	114	3	103	4	111
Aug. 27-Sept. 2	5	153	3	125	3	107	3	104	2	102	2	97	3	107	2	121	2	110	2	101	2	132	0	116	2	116	1	104	3	114
Sept. 3-9	5	158	3	128	3	110	3	107	3	105	3	100	3	110	4	125	4	114	3	104	4	136	3	119	4	120	4	108	3	117
10-16	5	163	3	131	1	111	1	108	0	105	1	101	1	111	3	128	2	116	1	105	3	139	2	121	2	122	2	110	2	119
17-23	7	170	5	136	4	115	3	111	4	109	5	106	4	115	6	134	7	123	6	111	6	145	5	126	6	128	7	117	5	124
24-30	6	176	6	142	6	121	5	116	5	114	5	111	5	120	6	140	7	130	6	117	7	152	6	132	6	134	7	124	5	129
Oct. 1-7	6	182	4	146	3	124	6	122	6	120	7	118	5	125	6	146	6	136	7	124	5	157	5	137	6	140	7	131	6	135
8-14	6	188	4	150	4	128	6	128	3	123	5	123	4	129	6	152	6	142	5	129	6	163	6	143	6	146	5	136	5	140
15-21	7	195	3	153	2	130	2	130	2	125	3	126	3	132	4	156	2	144	4	133	4	167	4	147	3	149	4	140	3	143
22-28	7	202	4	157	2	132	4	134	3	128	3	129	3	135	6	162	4	148	4	137	6	173	4	151	5	154	5	145	4	147
Oct. 29-Nov. 4	6	208	5	162	4	136	4	138	4	132	3	132	4	139	6	168	6	154	5	142	7	180	5	156	6	160	5	150	5	152
Nov. 5-11	3	211	4	166	7	143	3	141	3	135	2	134	4	143	1	169	3	157	1	143	1	181	2	158	2	162	2	152	3	155
12-18	4	215	4	170	5	148	5	146	4	139	5	139	5	148	2	171	3	160	4	147	3	184	4	162	3	165	5	157	4	159
19-25	5	220	5	175	6	154	5	151	4	143	3	142	4	152	4	175	5	165	4	151	4	188	3	165	4	169	6	163	4	163
Nov. 26-Dec. 2	7	227	4	179	3	157	4	155	3	146	4	146	4	156	6	181	5	170	3	154	5	193	3	168	4	173	3	166	4	167
Dec. 3-9	7	234	6	185	5	162	5	160	5	151	5	151	5	161	6	187	6	176	5	159	6	199	4	172	5	178	6	172	5	172
10-16	7	241	6	191	4	166	5	165	5	156	4	155	5	166	7	194	5	181	5	164	7	206	6	178	6	184	5	177	6	178
17-23	6	247	4	195	4	170	4	169	5	161	5	160	4	170	6	200	6	187	6	170	7	213	7	185	7	191	6	183	5	183
Dec. 24-30	5	252	4	199	3	173	2	171	3	164	2	162	3	173	5	205	4	191	3	173	4	217	4	189	4	195	2	185	4	187

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TABLE II.—SHOWING THE WEEKLY AND PROGRESSIVE AMOUNTS OF RAINFALL IN EACH DISTRICT, DURING THE YEAR 1893.

DATE. — LIMITS OF WEEKS.	Principal Wheat-producing Districts.														Principal Grazing, &c. Districts.												Channel Islands.		Means for the British Islands generally.	
	0. Scotland, N.		1. Scotland, E.		2. England, N.E.		3. England, E.		4. Midland Counties.		5. England, S.		Means for Wheat-producing Districts.		6. Scotland, W.		7. England, N.W.		8. England, S.W.		9. Ireland, N.		10. Ireland, S.		Means for Grazing, &c. Districts.					
	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.
	Rainfall in Inches.																													
1893.																														
Jan. 1-7	0·20	0·20	0·38	0·38	0·42	0·42	0·38	0·38	0·38	0·38	0·21	0·21	0·35	0·35	0·21	0·21	0·21	0·21	0·30	0·30	0·51	0·51	1·45	1·45	0·54	0·54	0·91	0·91	0·45	0·45
8-14	0·40	0·60	0·25	0·63	0·28	0·70	0·34	0·72	0·22	0·60	0·66	0·87	0·35	0·70	0·13	0·34	0·19	0·40	0·67	0·97	0·37	0·88	0·29	1·74	0·33	0·87	0·75	1·66	0·34	0·79
15-21	1·75	2·35	0·66	1·29	0·38	1·08	0·54	1·26	0·23	0·83	0·49	1·36	0·46	1·16	0·54	0·88	0·32	0·72	0·31	1·28	0·71	1·59	0·33	2·10	0·44	1·31	0·36	2·02	0·45	1·24
22-28	1·77	4·12	0·49	1·78	0·12	1·20	0·53	1·79	0·58	1·41	0·31	1·67	0·41	1·57	1·03	1·91	0·38	1·10	1·02	2·30	0·67	2·26	0·93	3·03	0·81	2·12	0·51	2·53	0·61	1·85
Jan. 29-Feb. 4	0·91	5·03	0·30	2·08	0·50	1·70	0·61	2·40	0·79	2·20	0·55	2·22	0·55	2·12	0·96	2·87	0·94	2·04	0·75	3·05	0·90	3·16	1·30	4·33	0·97	3·09	0·45	2·98	0·76	2·61
Feb. 5-11	2·36	7·39	0·92	3·00	0·25	1·95	0·32	2·72	0·41	2·61	0·47	2·69	0·48	2·60	2·09	4·96	0·94	2·98	1·14	4·19	1·30	4·46	0·89	5·22	1·27	4·36	0·64	3·62	0·88	3·49
12-18	1·39	8·78	1·04	4·04	0·57	2·52	0·41	3·13	0·67	3·28	0·77	3·46	0·69	3·29	2·24	7·20	1·28	4·26	1·76	5·95	1·28	5·74	1·44	6·66	1·60	5·96	1·06	4·68	1·14	4·63
19-25	0·25	9·03	0·50	4·54	0·68	3·20	1·09	4·22	1·02	4·30	1·26	4·72	0·91	4·20	0·33	7·53	0·51	4·77	1·55	7·50	0·29	6·03	1·03	7·69	0·74	6·70	1·29	5·97	0·83	5·46
Feb. 26-Mar. 4	0·66	9·69	0·87	5·41	1·19	4·39	0·86	5·08	0·53	4·83	0·95	5·67	0·88	5·08	1·39	8·92	1·26	6·03	0·84	8·34	0·97	7·00	0·66	8·35	1·03	7·73	1·03	7·00	0·96	6·42
Mar. 5-11	1·27	10·96	0·16	5·57	0·01	4·40	0·00	5·08	0·04	4·87	0·03	5·70	0·05	5·13	0·30	9·22	0·11	6·14	0·06	8·40	0·11	7·11	0·03	8·38	0·12	7·85	0·14	7·14	0·08	6·50
12-18	1·47	12·43	0·24	5·81	0·10	4·50	0·09	5·17	0·10	4·97	0·15	5·85	0·14	5·27	0·53	9·75	0·23	6·37	0·18	8·58	0·48	7·59	0·19	8·57	0·32	8·17	0·08	7·22	0·23	6·73
19-25	0·06	12·49	0·01	5·82	0·00	4·50	0·00	5·17	0·00	4·97	0·00	5·85	0·00	5·27	0·33	9·78	0·00	6·37	0·00	8·58	0·01	7·60	0·04	8·61	0·02	8·19	0·00	7·22	0·01	6·74
26-April 1	0·31	12·80	0·03	5·85	0·04	4·54	0·00	5·17	0·01	5·00	0·00	5·85	0·02	5·29	0·23	10·01	0·07	6·44	0·07	8·65	0·24	7·84	0·11	8·72	0·14	8·33	0·07	7·29	0·08	6·82
April 2-8	0·53	13·33	0·07	5·92	0·00	4·54	0·00	5·17	0·00	5·00	0·00	5·85	0·01	5·30	0·00	10·01	0·00	6·44	0·00	8·65	0·02	7·86	0·06	8·78	0·02	8·35	0·00	7·29	0·02	6·84
9-15	0·46	13·79	0·40	6·32	0·04	4·58	0·01	5·18	0·00	5·00	0·00	5·85	0·09	5·39	0·27	10·28	0·00	6·44	0·00	8·65	0·08	7·94	0·11	8·89	0·09	8·44	0·01	7·30	0·09	6·93
16-22	0·26	14·05	0·43	6·75	0·28	4·86	0·10	5·28	0·21	5·21	0·02	5·87	0·21	5·60	0·81	11·09	0·44	6·88	0·25	8·90	0·80	8·74	0·72	9·61	0·60	9·04	0·22	7·52	0·40	7·33
23-29	0·51	14·56	0·20	6·95	0·07	4·93	0·02	5·30	0·03	5·24	0·02	5·89	0·07	5·67	0·36	11·45	0·10	6·98	0·03	8·93	0·23	8·97	0·11	9·72	0·17	9·21	0·00	7·52	0·12	7·45
Apr. 30-6 May	0·33	14·89	0·18	7·13	0·31	5·24	0·08	5·38	0·13	5·37	0·01	5·90	0·14	5·81	0·31	11·76	0·29	7·27	0·19	9·03	0·44	9·11	0·34	10·06	0·30	9·51	0·02	7·54	0·22	7·67
May 7-13	0·46	15·35	0·19	7·32	0·00	5·24	0·00	5·38	0·00	5·37	0·00	5·90	0·04	5·85	0·21	11·97	0·00	7·27	0·00	9·03	0·01	9·42	0·00	10·06	0·04	9·55	0·00	7·54	0·04	7·71
14-20	0·38	15·73	0·49	7·81	0·93	6·17	0·40	5·78	1·50	6·87	0·59	6·49	0·78	6·63	1·43	13·40	1·23	8·50	1·34	10·37	0·71	10·13	1·18	11·24	1·18	10·73	1·17	8·71	0·98	8·69
21-27	0·78	16·51	0·22	8·03	0·05	6·22	0·32	6·10	0·04	6·91	0·13	6·62	0·15	6·78	0·48	13·88	0·16	8·66	0·08	10·45	0·43	10·56	0·32	11·56	0·29	11·02	0·02	8·73	0·22	8·91
May 28-June 3	0·17	16·68	0·30	8·33	0·29	6·51	0·18	6·28	0·13	7·04	0·08	6·70	0·20	6·98	0·08	13·96	0·21	8·87	0·04	10·49	0·21	10·77	0·23	11·79	0·15	11·17	0·01	8·74	0·18	9·09
June 4-10	0·27	16·95	0·43	8·76	0·26	6·77	0·37	6·65	0·29	7·24	0·16	6·86	0·28	7·26	0·36	14·32	0·17	9·04	0·11	10·60	0·61	11·38	0·42	12·21	0·34	11·51	0·00	8·74	0·31	9·40
11-17	0·12	17·07	0·00	8·76	0·00	6·77	0·00	6·65	0·06	7·30	0·01	6·87	0·01	7·27	0·01	14·33	0·12	9·16	0·14	10·74	0·10	11·48	0·02	12·23	0·08	11·59	0·01	8·75	0·05	9·45
18-24	0·45	17·52	1·52	10·28	0·57	7·34	0·53	7·18	0·41	7·71	0·35	7·22	0·68	7·95	0·51	14·84	0·59	9·75	0·30	11·04	0·23	11·71	0·24	12·47	0·37	11·96	0·10	8·85	0·52	9·97
June 25-July 1	0·43	17·95	0·70	10·98	0·42	7·76	0·26	7·44	0·38	8·09	0·35	7·57	0·42	8·37	0·52	15·36	0·88	10·63	0·64	11·68	1·05	12·76	1·03	13·50	0·82	12·78	0·50	9·35	0·62	10·59
July 2-8	0·52	18·47	0·62	11·60	1·74	9·50	0·46	7·90	0·72	8·81	0·61	8·18	0·83	9·20	1·08	16·44	0·71	11·34	1·07	12·75	0·27	13·03	0·68	14·18	0·76	13·54	1·03	10·38	0·80	11·39
9-15	0·31	18·78	0·50	12·10	0·46	9·96	0·92	8·82	1·22	10·03	1·26	9·44	0·87	10·07	0·44	16·88	1·21	12·55	1·70	14·45	1·33	14·36	1·06	15·24	1·15	14·69	0·86	11·24	1·01	12·40
16-22	1·83	20·61	0·92	13·02	0·55	10·51	0·87	9·69	0·55	10·58	0·74	10·18	0·73	10·80	1·52	18·40	0·65	13·20	1·21	15·66	1·37	15·73	0·43	15·67	1·03	15·72	0·86	12·10	0·88	13·28
23-29	1·04	21·65	0·45	13·47	0·16	10·67	0·44	10·13	0·36	10·94	0·58	10·76	0·40	11·20	0·72	19·12	0·48	13·68	0·72	16·38	0·47	16·20	0·19	15·86	0·52	16·24	0·47	12·57	0·46	13·74
July 30-Aug. 5	1·02	22·67	0·84	14·31	1·12	11·79	1·09	11·22	0·79	11·73	0·65	11·41	0·90	12·10	0·87	19·99	1·17	14·85	0·96	17·34	1·21	17·41	0·91	16·77	1·02	17·26	0·52	13·09	0·96	14·70
Aug. 6-12	0·56	23·23	0·38	14·64	0·42	12·21	0·77	11·99	0·49	12·22	0·10	11·51	0·42	12·52	1·00	20·99	0·79	15·64	0·50	17·84	1·47	18·88	1·35	18·12	1·02	18·28	0·30	13·39	0·72	15·42
13-19	0·79	24·02	0·56	15·20	0·20	12·41	0·00	11·99	0·03	12·25	0·04	11·55	0·16	12·68	0·58	21·57	0·44	16·08	0·37	18·21	0·87	19·75	0·81	18·93	0·62	18·90	0·07	13·46	0·39	15·81
20-26	1·60	25·62	1·25	16·45	0·36	12·77	0·58	12·37	0·38	12·63	0·47	12·02	0·57	13·25	1·49	23·06	0·71	16·79	0·58	18·79	1·19	20·94	1·09	20·02	1·01	19·91	0·46	13·92	0·79	16·60
Aug. 27-Sept. 2	0·59	26·21	0·32	16·77	0·17	12·94	0·13	12·50	0·28	12·91	0·28	12·30	0·24	13·49	0·22	23·28	0·22	17·01	0·06	18·85	0·09	21·03	0·05	20·07	0·13	20·04	0·09	14·01	0·19	16·79
Sept. 3-9	0·97	27·18	0·37	17·14	0·39	13·33	0·16	12·66	0·41	13·32	0·34	12·64	0·32	13·82	0·59	23·87	0·71	17·72	0·62	19·47	0·66	21·69	0·52	20·59	0·62	20·66	0·79	14·80	0·48	17·27
10-16	2·65	29·83	0·18	17·32	0·04	13·37	0·02	12·68	0·00	13·32	0·30	12·94	0·11	13·93	0·41	24·28	0·33	18·05	0·06	19·53	0·17	21·86	0·08	20·67	0·21	20·87	1·41	16·21	0·16	17·43
17-23	2·47	32·30	1·19	18·51	0·39	13·76	0·14	12·82	0·22	13·54	0·45	13·39	0·48	14·41	0·81	25·09	1·15	19·20	0·80	20·33	1·02	22·88	0·62	21·29	0·88	21·75	1·63	17·84	0·68	18·11
Sept. 24-30	1·35	33·65	0·53	19·04	0·79	14·55	0·49	13·31	0·59	14·13	1·16	14·55	0·71	15·12	1·52	26·61	1·83	21·03	1·24	21·57	1·06	23·94	0·95	22·24	1·32	23·07	1·26	19·10	1·01	19·12
Oct. 1-7	0·84	34·49	0·45	19·49	0·55	15·10	0·75	14·06	1·01	15·14	1·53	16·08	0·86	15·98	1·44	28·05	1·70	22·73	1·97	23·54	1·03	24·97	0·69	22·93	1·37	24·44	1·15	20·25	1·12	20·24
8-14	2·46	36·95	1·04	20·53	0·48	15·58	1·15	15·21	0·61	15·75	1·38	17·46	0·93	16·91	1·76	29·81	1·12	23·85	1·21	24·75	1·00	25·97	0·96	23·89	1·21	25·65	1·26	21·51	1·07	21·31
15-21	1·40	38·35	0·30	20·83	0·10	15·68	0·50	15·71	0·45	16·20	0·66	18·12	0·40	17·31	0·65	30·46	0·48	24·33	0·94	25·69	0·39	26·36	1·01	24·90	0·69	26·34	0·14	21·65	0·54	21·85
22-28	2·99	41·34	0·71	21·54	0·17	15·85	0·18	15·89	0·18	16·38	0·28	18·40	0·31	17·62	2·04	32·50	0·61	24·94	0·52	26·21	1·16	27·52	0·35	25·25	0·94	27·28	0·30	21·95	0·63	22·48
Oct. 29-Nov. 4	1·73	43·07	0·74	22·28	0·36	16·21	0·33	16·22	0·25	16·63	0·39	18·79	0·41	18·03	1·43	33·93	0·68	25·62	0·61	26·82	0·78	28·30	0·46	25·71	0·79	28·07	0·55	22·50	0·60	23·08
Nov. 5-11	0·19	43·26	0·53	22·81	0·79	17·00	0·22	16·44	0·07	16·70	0·14	18·93	0·35	18·38	0·02	33·95	0·07	25·69	0·01	26·83	0·02	28·32	0·06	25·77	0·04	28·11	0·17	22·67	0·20	23·28
12-18	1·85	45·11	1·17	23·98	0·79	17·79	1·24	17·68	0·72	17·42	1·12	20·05	1·01	19·39	0·79	34·74	0·50	26·19	1·42	28·25	0·92	29·24	0·87	26·64	0·90	29·01	1·15	23·82	0·95	24·23
19-25	1·06	46·17	0·57	24·55	0·66	18·45	1·06	18·74	0·41	17·83	0·40	20·45	0·62	20·01	0·94	35·68	0·92	27·11	0·60	28·85	0·53	29·82	0·31	26·95	0·67	29·68	0·62	24·44	0·65	24·88
Nov. 26-Dec. 2	3·87	50·04	0·19	24·74	0·40	18·85	0·62	19·36	0·18	18·01	0·29	20·74	0·34	20·35	0·92	36·60	0·69	27·80	0·35	29·20	0·34	30·16	0·65	27·60	0·59	30·27	0·30	24·74	0·47	25·35
Dec. 3-9	2·73	52·77	0·86	25·60	0·41	19·26	0·35	19·71	0·39	18·40	0·52	21·26	0·51	20·86	1·61	38·21	0·83	28·63	0·73	29·93	0·82	30·98	0·98	28·58	0·99	31·26	0·75	25·49	0·75	26·10
10-16	2·17	54·94	0·65	26·25	0·61	19·87	0·55	20·26	1·12	19·52	1·05	22·31	0·79	21·65	1·57	39·78	1·15	29·78	1·75	31·68	0·98	31·96	1·16	29·74	1·32	32·58	1·27	26·76	1·05	27·15
17-23	1·93	56·87	0·44	26·69	0·41	20·28	0·60	20·86	1·01	20·53	0·90	23·21	0·67	22·32	1·76	41·54	1·15	30·93	1·71	33·39	1·14	33·10	1·92	31·66	1·54	34·12	1·41	28·17	1·10	28·25
Dec. 24-30	1·02	57·89	0·58	27·27	0·12	20·40	0·08	20·94	0·20	20·73	0·09	23·30	0·21	22·53	1·46	43·00	0·50	31·43	0·32	33·71	0·90	34·00	1·00	32·66	0·84	34·96	0·07	28·24	0·53	28·78

TABLE III.—SHOWING THE WEEKLY AND PROGRESSIVE VALUES OF ACCUMULATED HEAT ABOVE 42° F. IN EACH DISTRICT, DURING THE YEAR 1893.

DATE. — LIMITS OF WEEKS.	Principal Wheat-producing Districts.														Principal Grazing, &c. Districts.												Channel Islands.		Means for the British Islands generally.	
	0. Scotland, N.		1. Scotland, E.		2. England, N.E.		3. England, E.		4. Midland Counties.		5. England, S.		Means for Wheat-producing Districts.		6. Scotland, W.		7. England, N.W.		8. England, S.W.		9. Ireland, N.		10. Ireland, S.		Means for Grazing, &c. Districts.					
	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.
	Day-Degrees above 42° Fahrenheit.																													
1893.																														
Jan. 1-7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8-14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	7	0	0
15-21	4	4	5	5	1	1	0	0	0	0	0	1	1	1	10	10	4	4	8	8	20	20	27	27	14	14	24	31	7	7
22-28	10	14	11	16	12	13	10	10	15	15	11	11	12	13	21	31	18	22	24	32	21	41	30	57	23	37	29	60	18	25
Jan. 29-Feb. 4	20	34	13	29	11	24	13	23	26	41	24	35	17	30	21	52	23	45	32	64	26	67	37	94	28	65	43	103	23	48
Feb. 5-11	9	43	10	39	9	33	13	36	15	56	16	51	13	43	18	70	12	57	25	89	24	91	28	122	21	86	30	133	17	65
12-18	2	45	4	43	15	48	18	54	17	73	27	78	16	59	7	77	24	81	26	115	17	108	39	152	21	107	32	165	18	83
19-25	0	45	0	43	0	48	2	56	0	73	7	85	2	61	2	79	0	81	8	123	3	111	6	158	4	111	22	187	3	86
Feb. 26-Mar. 4	0	45	0	43	8	56	28	84	28	101	27	112	18	79	5	84	11	92	28	151	14	125	27	185	17	128	38	225	18	104
Mar. 5-11	27	72	37	80	36	92	46	130	46	147	43	155	42	121	28	112	25	117	37	188	32	157	39	224	32	160	41	266	37	141
12-18	0	72	7	87	31	123	39	169	38	185	35	190	30	151	10	122	21	138	32	220	13	170	30	254	21	181	48	314	25	166
19-25	46	118	64	151	57	180	56	225	70	255	49	239	59	210	50	172	56	194	52	272	51	221	48	302	52	233	53	367	55	221
Mar. 26-April 1	35	153	41	192	48	228	68	293	72	327	63	302	58	268	45	217	53	247	56	328	43	264	49	351	49	282	69	436	54	275
April 2-8	46	199	52	244	42	270	48	341	67	394	60	362	54	322	56	273	58	305	69	397	54	318	60	411	60	342	77	513	57	332
9-15	33	232	41	285	36	306	46	387	52	446	45	407	44	366	45	318	41	346	46	443	44	362	51	462	45	387	50	563	45	377
16-22	46	278	42	327	42	348	74	461	88	534	90	497	67	433	56	374	83	429	94	537	78	440	94	556	81	468	97	660	74	451
23-29	52	330	61	388	51	399	77	538	89	623	88	585	73	506	69	443	77	506	95	632	66	506	84	640	78	546	97	757	75	526
Apr. 30-May 6	44	374	47	435	50	449	64	602	76	699	82	667	64	570	57	500	74	580	82	714	72	578	87	727	74	620	92	849	69	595
May 7-13	66	440	71	506	67	516	74	676	85	784	90	757	78	648	80	580	81	661	93	807	87	665	93	820	87	707	95	942	83	678
14-20	66	506	69	575	75	591	104	780	102	886	112	869	92	740	85	665	100	761	104	911	97	762	99	919	97	804	105	1047	94	772
21-27	67	573	88	663	90	681	96	876	90	976	101	970	93	833	83	748	84	845	92	1003	88	850	97	1016	89	893	104	1151	91	863
May 28-June 3	57	630	67	730	70	751	67	943	80	1056	86	1056	74	907	74	822	82	927	98	1101	87	937	97	1113	83	981	109	1260	81	944
June 4-10	88	718	92	822	90	841	103	1046	111	1167	113	1169	102	1009	107	929	116	1043	117	1218	112	1049	122	1235	115	1096	131	1391	109	1053
11-17	116	834	117	939	104	945	130	1176	134	1301	144	1313	126	1135	134	1063	133	1176	141	1359	139	1188	137	1372	137	1233	143	1534	132	1185
18-24	81	915	99	1038	111	1056	123	1299	126	1427	136	1449	119	1254	98	1161	116	1292	137	1496	106	1294	123	1495	116	1349	146	1680	117	1302
June 25-July 1	89	1004	99	1137	116	1172	125	1424	128	1555	130	1579	119	1373	103	1264	121	1413	125	1621	113	1407	116	1611	115	1464	141	1821	117	1419
July 2-8	125	1129	116	1253	121	1295	155	1579	166	1721	162	1741	144	1517	139	1403	158	1571	155	1776	132	1539	141	1752	145	1609	154	1975	145	1564
9-15	103	1232	102	1355	109	1402	126	1705	121	1842	134	1875	118	1635	115	1518	123	1694	126	1902	113	1652	129	1872	120	1729	139	2114	119	1683
16-22	88	1320	99	1454	114	1516	131	1836	122	1964	133	2008	120	1755	99	1617	120	1814	127	2029	106	1758	119	1991	114	1843	141	2255	117	1800
23-29	94	1414	104	1558	111	1627	129	1965	127	2091	137	2145	122	1877	102	1719	127	1941	130	2159	119	1877	134	2125	122	1965	140	2395	122	1922
July 30-Aug. 5	84	1498	93	1653	115	1742	124	2089	120	2211	133	2278	117	1994	101	1820	119	2060	125	2284	106	1983	125	2250	115	2080	141	2536	116	2038
Aug. 6-12	116	1614	130	1783	147	1889	162	2251	163	2374	165	2443	153	2147	137	1957	160	2220	157	2441	146	2129	160	2410	152	2232	169	2705	153	2191
13-19	139	1753	158	1941	181	2070	193	2444	195	2569	195	2638	185	2332	151	2108	179	2399	169	2610	166	2295	172	2582	168	2400	187	2892	176	2367
20-26	94	1847	103	2044	125	2195	134	2578	128	2697	144	2782	127	2459	109	2217	128	2527	135	2745	107	2402	118	2700	119	2519	156	3048	123	2490
Aug. 27-Sept. 2	88	1935	102	2146	109	2304	109	2687	114	2811	122	2904	111	2570	104	2321	113	2640	119	2864	107	2509	109	2809	110	2629	138	3186	110	2600
Sept. 3-9	85	2020	93	2239	114	2418	119	2806	120	2931	133	3037	116	2686	98	2419	118	2758	129	2993	106	2615	118	2927	114	2743	155	3341	115	2715
10-16	73	2093	81	2320	91	2509	91	2897	84	3015	113	3150	92	2778	82	2501	90	2857	102	3095	90	2705	101	3028	95	2838	126	3467	94	2809
17-23	34	2127	46	2366	62	2571	79	2976	69	3084	87	3237	69	2847	53	2554	71	2928	76	3171	57	2762	57	3085	63	2901	100	3567	66	2875
24-30	38	2165	41	2407	57	2628	78	3054	75	3159	90	3327	68	2915	60	2614	78	3006	85	3256	72	2834	83	3168	76	2977	109	3676	72	2947
Oct. 1-7	38	2203	48	2455	50	2678	67	3121	59	3218	77	3404	60	2975	45	2659	57	3063	64	3320	45	2879	59	3218	52	3029	97	3773	56	3003
8-14	31	2234	40	2495	54	2732	70	3191	57	3275	77	3481	60	3035	43	2702	63	3126	64	3384	44	2923	50	3268	53	3082	89	3862	56	3059
15-21	60	2294	72	2567	81	2813	90	3281	83	3358	92	3573	83	3118	76	2778	88	3214	92	3476	77	3000	87	3355	84	3166	109	3971	84	3143
22-28	31	2325	37	2604	43	2856	42	3323	45	3403	53	3626	44	3162	46	2824	62	3276	57	3533	39	3039	52	3407	51	3217	78	4049	48	3191
Oct. 29-Nov. 4	1	2326	5	2609	16	2872	35	3358	35	3438	41	3667	26	3188	16	2840	30	3306	40	3573	30	3069	37	3444	31	3248	65	4114	28	3219
Nov. 5-11	2	2328	3	2612	12	2884	12	3370	10	3448	11	3678	10	3198	7	2847	11	3317	11	3584	11	3080	13	3457	11	3259	25	4139	11	3230
12-18	0	2328	4	2616	25	2909	16	3386	12	3460	24	3702	16	3214	11	2858	21	3338	25	3609	11	3091	24	3481	18	3277	38	4177	17	3247
19-25	0	2328	1	2617	6	2915	7	3393	4	3464	6	3708	5	3219	8	2866	6	3344	11	3620	9	3100	11	3492	9	3286	24	4201	7	3254
Nov. 26-Dec. 2	9	2337	10	2627	12	2927	12	3405	13	3477	12	3720	12	3231	16	2882	21	3365	21	3641	21	3121	13	3505	19	3305	20	4230	16	3270
Dec. 3-9	21	2358	13	2640	14	2941	8	3413	14	3491	12	3732	12	3243	24	2906	24	3391	30	3671	23	3144	31	3536	27	3332	35	4265	19	3289
10-16	6	2364	6	2646	13	2954	20	3433	18	3509	33	3765	18	3261	10	2916	17	3408	36	3707	8	3152	34	3570	21	3353	41	4306	19	3308
17-23	9	2373	8	2654	9	2963	11	3444	13	3522	25	3790	13	3274	23	2939	21	3429	28	3735	11	3163	28	3598	22	3375	32	4338	18	3326
24-30	22	2395	21	2675	10	2973	4	3448	8	3530	9	3799	11	3285	25	2964	21	3450	21	3756	24	3187	31	3629	24	3399	25	4363	18	3344

TABLE IV.—SHOWING THE WEEKLY AND PROGRESSIVE VALUES OF ACCUMULATED HEAT BELOW 42° F. IN EACH DISTRICT, DURING THE YEAR 1893.

DATE. — LIMITS OF WEEKS.	Principal Wheat-producing Districts.														Principal Grazing, &c. Districts.												Channel Islands.		Means for the British Islands generally.	
	0. Scotland, N.		1. Scotland, E.		2. England, N.E.		3. England, E.		4. Midland Counties.		5. England, S.		Means for Wheat-producing Districts.		6. Scotland, W.		7. England, N.W.		8. England, S.W.		9. Ireland, N.		10. Ireland, S.		Means for Grazing, &c. Districts.					
	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.
	Day-Degrees below 42° Fahrenheit.																													
1893.																														
Jan. 1-7	95	95	105	105	95	95	111	111	117	117	108	108	107	107	85	85	92	92	73	73	69	69	50	50	74	74	41	41	91	91
8-14	57	152	51	156	43	138	54	165	57	174	49	157	51	158	47	132	44	136	38	111	32	101	25	75	37	111	20	61	44	135
15-21	32	184	34	190	35	173	62	227	41	215	46	203	44	202	25	157	26	162	30	141	10	111	13	88	21	132	7	68	32	167
22-28	22	206	23	213	22	195	30	257	28	243	24	227	25	227	5	162	8	170	11	152	5	116	8	96	7	139	0	68	16	183
Jan. 29-Feb. 4	11	217	23	236	19	214	21	278	8	251	4	231	15	242	6	168	5	175	0	152	4	120	0	96	3	142	0	68	9	192
Feb. 5-11	23	240	26	262	28	242	36	314	28	279	26	257	29	271	10	178	19	194	8	160	7	127	1	97	9	151	0	68	19	211
12-18	38	278	42	304	26	268	29	343	30	309	13	270	28	299	25	203	14	208	11	171	23	150	14	111	17	168	1	69	22	233
19-25	38	316	43	347	27	295	26	369	29	338	18	288	28	328	29	232	27	235	20	191	32	182	25	136	27	195	1	70	28	261
Feb. 26-Mar. 4	42	358	53	400	32	327	18	387	18	356	9	297	26	354	32	264	25	260	9	200	24	206	15	151	21	216	0	70	24	285
Mar. 5-11	7	365	5	405	4	331	14	401	13	369	11	308	9	363	1	265	3	263	8	208	1	207	0	151	3	219	0	70	6	291
12-18	36	401	35	440	19	350	15	416	15	384	7	315	18	381	26	291	13	276	4	212	22	229	3	154	14	233	0	70	16	307
19-25	23	424	31	471	25	375	35	451	39	423	24	339	31	412	25	316	17	293	15	227	8	237	6	160	14	247	0	70	23	330
Mar. 26-April 1	13	437	19	490	17	392	26	477	28	451	14	353	21	433	11	327	6	299	7	234	5	242	3	163	6	253	0	70	13	343
April 2-8	10	447	15	505	14	406	16	493	20	471	3	356	14	447	11	338	9	308	0	234	8	250	4	167	6	259	0	70	10	353
9-15	22	469	22	527	20	426	22	515	26	497	17	373	21	468	16	354	15	323	12	246	8	258	11	178	13	272	0	70	17	370
16-22	9	478	8	535	3	429	4	519	0	497	0	373	3	471	0	354	0	323	0	246	0	258	0	178	0	272	0	70	2	372
23-29	2	480	7	542	6	435	5	524	4	501	0	373	4	475	0	354	0	323	0	246	0	258	0	178	0	272	0	70	2	374
Apr. 30-May 6	5	485	6	548	1	436	0	524	0	501	0	373	1	476	0	354	0	323	0	246	0	258	0	178	0	272	0	70	1	375
May 7-13	0	485	0	548	0	436	0	524	4	505	0	373	1	477	0	354	0	323	0	246	0	258	0	178	0	272	0	70	0	375
14-20	0	485	0	548	0	436	0	524	0	505	0	373	0	477	0	354	0	323	0	246	0	258	0	178	0	272	0	70	0	375
21-27	0	485	0	548	0	436	0	524	0	505	0	373	0	477	0	354	0	323	0	246	0	258	0	178	0	272	0	70	0	375
May 28-June 3	0	485	0	548	0	436	0	524	0	505	0	373	0	477	0	354	0	323	0	246	0	258	0	178	0	272	0	70	0	375
June 4-10	0	485	0	548	0	436	0	524	0	505	0	373	0	477	0	354	0	323	0	246	0	258	0	178	0	272	0	70	0	375
11-17	0	485	0	548	0	436	0	524	0	505	0	373	0	477	0	354	0	323	0	246	0	258	0	178	0	272	0	70	0	375
18-24	0	485	0	548	0	436	0	524	0	505	0	373	0	477	0	354	0	323	0	246	0	258	0	178	0	272	0	70	0	375
June 25-July 1	0	485	0	548	0	436	0	524	0	505	0	373	0	477	0	354	0	323	0	246	0	258	0	178	0	272	0	70	0	375
July 2-8	0	485	0	548	0	436	0	524	0	505	0	373	0	477	0	354	0	323	0	246	0	258	0	178	0	272	0	70	0	375
9-15	0	485	0	548	0	436	0	524	0	505	0	373	0	477	0	354	0	323	0	246	0	258	0	178	0	272	0	70	0	375
16-22	0	485	0	548	0	436	0	524	0	505	0	373	0	477	0	354	0	323	0	246	0	258	0	178	0	272	0	70	0	375
23-29	0	485	0	548	0	436	0	524	0	505	0	373	0	477	0	354	0	323	0	246	0	258	0	178	0	272	0	70	0	375
July 30-Aug. 5	0	485	0	548	0	436	0	524	0	505	0	373	0	477	0	354	0	323	0	246	0	258	0	178	0	272	0	70	0	375
Aug. 6-12	0	485	0	548	0	436	0	524	0	505	0	373	0	477	0	354	0	323	0	246	0	258	0	178	0	272	0	70	0	375
13-19	0	485	0	548	0	436	0	524	0	505	0	373	0	477	0	354	0	323	0	246	0	258	0	178	0	272	0	70	0	375
20-26	0	485	0	548	0	436	0	524	0	505	0	373	0	477	0	354	0	323	0	246	0	258	0	178	0	272	0	70	0	375
Aug. 27-Sept. 2	0	485	0	548	0	436	0	524	0	505	0	373	0	477	0	354	0	323	0	246	0	258	0	178	0	272	0	70	0	375
Sept. 3-9	0	485	0	548	0	436	0	524	0	505	0	373	0	477	0	354	0	323	0	246	0	258	0	178	0	272	0	70	0	375
10-16	0	485	0	548	0	436	0	524	0	505	0	373	0	477	0	354	0	323	0	246	0	258	0	178	0	272	0	70	0	375
17-23	0	485	0	548	0	436	0	524	0	505	0	373	0	477	0	354	0	323	0	246	0	258	0	178	0	272	0	70	0	375
24-30	6	491	4	552	0	436	0	524	0	505	0	373	1	478	0	354	0	323	0	246	0	258	0	178	0	272	0	70	0	375
Oct. 1-7	0	491	10	562	4	440	0	524	4	509	0	373	3	481	5	359	0	323	0	246	5	263	3	181	2	274	0	70	2	377
8-14	1	492	7	569	0	440	0	524	1	510	0	373	2	483	0	359	0	323	0	246	5	268	3	184	2	276	0	70	2	379
15-21	0	492	0	569	0	440	0	524	0	510	0	373	0	483	0	359	0	323	0	246	0	268	0	184	0	276	0	70	0	379
22-28	3	495	3	572	0	440	2	526	0	510	0	373	1	484	0	359	0	323	0	246	0	268	0	184	0	276	0	70	1	380
Oct. 29-Nov. 4	30	525	34	606	13	470	19	545	20	530	8	381	22	506	29	388	10	333	2	248	14	282	5	189	12	288	0	70	17	397
Nov. 5-11	28	553	28	634	19	489	32	577	35	565	23	404	27	533	32	420	20	353	25	273	30	312	31	220	28	316	0	70	27	424
12-18	34	587	29	663	8	497	26	603	33	598	12	416	22	555	22	442	12	365	7	280	25	337	11	231	15	331	0	70	19	443
19-25	35	622	37	700	31	528	32	635	36	634	32	448	34	589	29	471	26	391	28	308	25	362	26	257	27	358	9	79	31	474
Nov. 26-Dec. 2	39	661	38	738	25	553	25	660	30	664	24	472	29	618	28	499	13	404	13	321	12	374	21	278	17	375	0	79	23	497
Dec. 3-9	13	674	27	765	26	579	35	695	40	704	34	506	32	650	7	506	9	413	16	337	11	385	11	289	11	386	2	81	22	519
10-16	29	703	35	800	31	610	35	730	36	740	13	519	30	680	26	532	32	445	13	350	29	414	17	306	23	409	0	81	26	545
17-23	22	725	26	826	23	633	30	760	26	766	15	534	24	704	7	539	8	453	5	355	22	436	8	314	10	419	0	81	17	562
Dec. 24-30	9	734	11	837	19	652	35	795	30	796	25	559	24	728	0	539	6	459	7	362	4	440	0	314	9	423	0	81	14	576

TABLE V.—SHOWING THE WEEKLY AND PROGRESSIVE NUMBERS OF HOURS OF BRIGHT SUNSHINE IN EACH DISTRICT, REGISTERED DURING THE YEAR 1893.

DATE. — LIMITS OF WEEKS.	Principal Wheat-producing Districts.														Principal Grazing, &c. Districts.															
	0. Scotland, N.		1. Scotland, E.		2. England, N.E.		3. England, E.		4. Midland Counties.		5. England, S.		Means for Wheat-producing Districts.		6. Scotland, W.		7. England, N.W.		8. England, S.W.		9. Ireland, N.		10. Ireland, S.		Means for Grazing, &c. Districts.		Channel Islands.		Means for the British Islands generally.	
	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.
	Numbers of Hours of Bright Sunshine.																													
1893.																														
Jan. 1-7	6	6	3	3	11	11	10	10	10	10	12	12	9	9	9	9	10	10	13	13	9	9	8	8	10	10	11	11	10	10
8-14	14	20	7	10	3	14	6	16	8	8	5	17	6	15	15	24	4	14	11	24	9	18	9	17	10	20	7	18	8	18
15-21	2	22	7	17	9	23	6	22	9	27	4	21	7	22	10	34	7	21	17	41	6	24	8	25	9	29	8	26	8	26
22-28	5	27	9	26	7	30	14	36	10	37	9	30	10	32	6	40	6	27	13	54	6	30	9	34	8	37	15	41	9	35
Jan. 29-Feb. 4	8	35	14	40	12	42	8	44	11	48	12	42	11	43	12	52	11	38	15	69	12	42	14	48	13	50	15	56	12	47
Feb. 5-11	7	42	16	56	20	62	25	69	23	71	21	63	21	64	16	68	13	51	21	90	14	56	17	65	16	66	23	79	18	65
12-18	19	61	22	78	13	75	13	82	11	82	13	76	14	78	12	80	11	62	12	102	19	75	19	84	14	80	18	97	14	79
19-25	14	75	9	87	11	86	12	94	10	92	16	92	12	90	9	89	9	71	15	117	16	91	14	98	13	93	24	121	13	92
Feb. 26-Mar. 4	10	85	15	102	19	105	20	114	23	115	13	105	18	108	21	110	19	90	24	141	19	110	20	118	21	114	18	139	20	112
Mar. 5-11	14	99	27	129	23	128	31	145	28	143	35	140	29	137	20	130	20	110	30	171	12	122	21	139	20	134	41	180	24	136
12-18	15	114	35	164	43	171	35	180	36	179	36	176	37	174	37	167	34	144	33	204	24	146	22	161	30	164	38	218	34	170
19-25	31	145	56	220	58	229	65	245	64	243	65	241	61	235	43	210	53	197	69	273	44	190	51	212	52	216	77	295	56	226
26-Apr. 1	31	176	36	256	37	266	63	308	52	295	67	308	51	286	32	242	42	239	57	330	25	215	32	244	38	254	74	369	45	271
April 2-8	40	216	42	298	56	322	57	365	61	356	66	374	56	342	55	297	64	303	68	398	40	264	61	305	59	313	72	441	58	329
9-15	32	248	36	334	54	376	49	414	50	406	53	427	49	391	47	344	53	356	64	462	34	298	58	363	51	364	55	496	50	379
16-22	26	274	24	358	31	407	56	470	49	455	56	483	43	434	35	379	36	392	47	509	20	327	23	389	35	399	61	557	39	418
23-29	46	320	50	408	59	466	72	542	67	522	71	554	64	498	65	444	53	445	74	583	51	378	58	447	60	459	89	637	62	480
April 30-May 6	24	344	32	440	43	509	52	594	50	572	58	612	47	545	31	475	43	488	59	642	19	397	28	475	36	495	82	719	42	522
May 7-13	39	383	54	494	65	574	77	671	79	651	77	689	70	615	54	529	68	556	82	724	50	447	60	535	63	558	92	811	67	589
14-20	25	408	21	515	26	600	40	711	24	675	37	726	30	645	18	547	18	574	27	751	26	473	33	568	24	582	28	839	27	616
21-27	20	428	40	555	42	642	45	756	48	723	47	773	44	689	42	589	31	605	50	801	21	494	22	590	33	615	70	909	38	654
May 28-June 3	25	453	35	590	28	670	46	802	34	757	47	820	38	727	56	645	43	648	57	858	33	527	46	636	47	662	77	986	43	697
June 4-11	40	493	35	625	48	718	54	856	46	803	55	875	48	775	45	690	53	701	75	933	42	569	43	682	52	714	83	1069	50	747
11-17	66	559	73	698	62	780	70	926	58	861	73	948	67	842	72	762	79	780	69	1002	51	620	42	724	63	777	89	1149	65	812
18-24	24	583	29	727	29	809	43	969	45	906	50	998	39	881	49	811	34	814	76	1078	48	668	57	781	53	830	87	1236	46	858
June 25-July 1	31	614	41	768	43	852	53	1022	53	959	49	1047	48	929	45	856	44	858	56	1134	47	715	41	822	46	876	62	1298	47	905
July 2-8	35	649	26	794	41	893	67	1089	54	1013	67	1114	51	980	45	901	55	913	47	1181	35	750	40	862	44	920	52	1350	47	952
9-15	14	663	16	810	20	913	31	1120	24	1037	36	1150	26	1006	29	930	22	935	43	1224	28	778	25	887	30	950	54	1404	28	980
16-22	18	681	45	855	45	958	32	1152	41	1078	34	1184	39	1045	48	978	48	983	38	1262	53	831	39	926	45	995	44	1448	42	1022
23-29	30	711	34	889	30	988	43	1195	33	1111	41	1225	36	1081	28	1006	29	1012	47	1309	38	869	35	961	35	1030	50	1498	36	1058
July 30-Aug. 5	19	730	30	919	38	1026	36	1231	43	1154	44	1269	38	1119	48	1054	40	1052	53	1362	39	908	39	1000	44	1074	75	1573	41	1099
Aug. 6-12	21	751	30	949	40	1066	52	1283	50	1204	58	1327	46	1165	25	1079	37	1089	37	1399	35	943	34	1034	33	1107	77	1650	40	1139
13-19	29	780	57	1006	60	1126	67	1350	60	1264	72	1399	64	1229	50	1129	50	1139	60	1459	42	985	45	1079	49	1156	83	1733	56	1195
20-26	28	808	42	1048	44	1170	48	1398	56	1320	51	1450	48	1277	48	1177	46	1185	59	1518	42	1027	48	1127	49	1205	55	1788	49	1244
Aug. 27-Sept. 2	13	821	30	1078	27	1197	29	1427	31	1351	34	1484	30	1307	39	1216	33	1218	52	1570	21	1048	46	1173	38	1243	61	1849	34	1278
Sept. 3-9	28	849	39	1117	41	1238	47	1474	43	1394	48	1532	44	1351	44	1260	38	1256	56	1626	28	1076	43	1216	42	1285	66	1915	43	1321
10-16	30	879	39	1156	40	1278	52	1526	46	1440	49	1581	45	1396	44	1304	35	1291	38	1664	35	1111	35	1251	37	1322	45	1960	41	1362
17-23	15	894	18	1174	34	1312	28	1554	32	1472	23	1604	27	1423	29	1333	25	1316	26	1690	31	1142	35	1286	29	1351	24	1984	28	1390
Sept. 24-30	25	919	21	1195	24	1336	25	1579	29	1501	31	1635	26	1449	17	1350	20	1336	31	1721	26	1168	23	1309	24	1375	34	2018	25	1415
Oct. 1-7	14	933	32	1227	38	1374	47	1626	39	1540	41	1676	39	1488	35	1385	31	1367	38	1759	34	1202	43	1352	36	1411	41	2059	37	1452
8-14	11	944	27	1254	35	1409	29	1655	28	1568	27	1703	29	1517	25	1410	27	1394	22	1781	21	1223	29	1372	23	1434	27	2085	23	1478
15-21	6	950	15	1269	17	1426	21	1676	18	1586	22	1725	19	1536	12	1422	5	1399	22	1803	11	1234	10	1382	12	1446	33	2119	16	1494
22-28	7	957	21	1290	28	1454	21	1697	20	1606	22	1747	23	1559	14	1436	15	1414	15	1818	12	1246	17	1399	15	1461	23	2142	19	1513
Oct. 29-Nov. 4	13	970	28	1318	27	1481	20	1717	20	1626	19	1766	23	1582	26	1462	19	1433	17	1835	21	1267	18	1417	20	1481	18	2160	22	1535
Nov. 5-11	8	978	8	1326	15	1496	29	1746	22	1648	24	1790	20	1602	21	1483	17	1450	35	1870	26	1293	24	1441	25	1506	26	2186	22	1557
12-18	4	982	5	1331	11	1507	17	1763	9	1657	15	1805	11	1613	8	1491	9	1459	7	1877	15	1308	16	1457	11	1517	16	2202	11	1568
19-25	2	984	8	1339	9	1516	9	1772	11	1668	10	1815	9	1622	14	1505	9	1468	22	1899	17	1325	14	1471	15	1532	10	2212	12	1580
Nov. 26-Dec. 2	6	990	11	1350	13	1529	10	1782	12	1680	12	1827	12	1634	15	1520	12	1480	15	1914	16	1341	15	1486	15	1547	13	2225	14	1594
Dec. 3-9	0	990	4	1354	7	1536	11	1793	10	1690	15	1842	9	1643	4	1524	5	1485	14	1928	6	1347	7	1493	7	1554	16	2241	8	1602
10-16	1	991	6	1360	9	1545	9	1802	9	1699	6	1848	8	1651	8	1532	7	1492	13	1941	13	1360	14	1507	11	1565	20	2261	9	1611
17-23	1	992	7	1367	6	1551	14	1816	8	1707	11	1859	9	1660	7	1539	5	1497	9	1950	15	1375	17	1524	11	1576	10	2271	10	1621
Dec. 24-30	1	993	6	1373	7	1558	15	1831	8	1715	16	1875	10	1670	2	1541	3	1500	14	1964	5	1380	8	1532	6	1582	29	2300	8	1629

TABLE VI.—SHOWING THE WEEKLY AND PROGRESSIVE VALUES FOR THE PERCENTAGES OF THE POSSIBLE DURATION OF BRIGHT SUNSHINE IN EACH DISTRICT, WHICH WAS ACTUALLY RECORDED DURING THE YEAR 1893.

DATE. — LIMITS OF WEEKS.	0. Scotland, N.		Principal Wheat-producing Districts.												Principal Grazing, &c. Districts.												Channel Islands.		Means for the British Islands generally.	
			1. Scotland, E.		2. England, N.E.		3. England, E.		4. Midland Counties.		5. England, S.		Means for Wheat Producing Districts.		6. Scotland, W.		7. England, N.W.		8. England, S.W.		9. Ireland, N.		10. Ireland, S.		Means for Grazing, &c. Districts.					
	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.	Weekly.	From Jan. 1.
	Percentages of Possible Duration.																													
1893.																														
Jan. 1–7	13	13	7	7	21	21	18	18	18	18	22	22	17	17	18	18	20	20	24	24	16	16	15	15	19	19	20	20	18	18
8–14	29	21	13	10	6	13	12	15	15	17	9	15	11	14	28	23	7	13	19	21	16	17	16	16	17	18	11	15	14	16
15–21	3	15	14	11	16	14	11	13	15	16	7	12	12	13	19	22	13	13	28	24	11	15	15	15	17	18	14	15	15	16
22–28	9	14	18	13	11	14	24	16	17	17	15	13	17	15	10	19	10	13	20	23	10	14	16	15	13	17	24	17	15	16
Jan. 29–Feb. 4	14	14	23	15	20	15	12	15	18	17	20	14	19	15	20	19	18	13	24	23	20	15	22	17	21	17	22	18	20	16
Feb. 5–11	12	13	26	17	32	18	38	20	35	20	32	17	33	18	26	20	20	15	32	25	22	16	26	19	23	19	35	21	29	19
12–18	29	16	33	20	20	18	19	20	16	20	19	18	21	19	18	20	16	15	18	24	29	18	28	20	22	20	26	22	22	20
19–25	20	17	13	19	16	18	17	19	14	19	22	18	16	19	12	19	13	15	20	23	23	19	20	20	18	19	33	23	17	19
Feb. 26–Mar. 4	14	16	20	19	25	19	26	20	30	20	18	18	24	19	28	20	25	16	31	24	26	20	26	21	27	21	24	23	26	20
Mar. 5–11	18	16	35	21	29	20	30	22	36	22	44	21	37	21	26	21	26	17	38	26	16	19	27	22	27	21	52	27	32	21
12–18	18	17	44	24	52	24	43	25	44	25	44	24	45	24	46	24	39	20	40	28	30	20	26	22	36	23	46	29	41	24
19–25	36	19	66	28	68	29	76	30	75	30	77	29	72	29	51	27	62	25	81	33	52	24	60	26	61	27	91	35	67	29
Mar. 26–April 1	35	21	40	30	42	30	72	34	59	33	76	34	58	32	36	27	47	27	65	36	29	24	37	27	43	28	85	40	51	30
April 2–8	43	23	55	31	61	33	62	37	66	36	72	37	63	35	60	31	69	31	75	40	53	27	66	31	64	32	79	43	63	34
May 9–15	33	24	37	32	56	35	52	38	53	37	56	39	51	36	49	32	56	33	68	42	36	28	61	33	54	34	59	45	53	35
16–22	26	24	24	31	31	35	57	40	51	38	58	40	44	37	35	32	37	33	48	42	30	28	27	33	35	34	63	46	39	36
23–29	44	25	49	32	58	37	71	42	66	41	71	43	63	39	63	35	51	35	73	45	50	30	57	35	59	36	81	49	61	38
Apr. 30–May 6	22	25	30	32	40	37	50	43	48	41	56	44	45	39	29	34	41	35	57	46	18	29	27	34	34	36	81	51	40	39
7–13	35	26	49	33	60	38	73	45	74	43	72	46	66	41	56	36	63	37	78	48	46	30	56	36	59	37	88	54	62	39
14–20	22	26	19	32	23	37	37	44	22	42	35	45	27	40	16	34	16	36	24	46	23	29	30	35	22	36	26	52	24	38
21–27	17	25	34	32	36	37	41	44	42	42	43	45	39	40	37	34	28	35	46	46	19	29	20	34	30	36	65	53	35	39
May 28–June 3	21	25	29	32	24	37	40	44	30	41	42	45	33	40	48	35	37	35	51	47	29	29	40	[illegible]	41	36	70	54	37	38
June 4–10	33	25	29	32	41	37	47	44	40	41	48	45	41	40	38	35	46	36	66	48	36	29	40	35	45	37	75	55	43	39
11–17	54	27	60	34	52	38	60	45	50	42	63	46	57	41	60	37	67	38	61	49	43	30	36	35	53	38	71	56	55	39
18–24	20	27	24	33	25	37	37	44	38	42	44	46	34	40	41	37	29	37	67	50	41	31	49	36	45	38	77	57	40	39
June 25–July 1	25	26	34	33	36	37	46	45	45	42	43	46	41	41	38	37	38	37	49	49	40	31	35	36	40	38	56	57	41	39
July 2–8	28	27	21	33	35	37	59	45	47	42	59	46	44	41	39	37	47	38	42	49	30	31	35	36	39	38	47	56	42	40
9–15	11	26	13	32	18	36	27	44	21	41	32	46	22	40	25	37	19	37	38	49	24	31	22	35	26	38	49	56	24	39
16–22	15	25	39	32	40	36	29	44	37	41	30	45	35	40	42	37	43	37	35	48	47	31	34	35	40	38	41	55	38	39
23–29	26	25	30	32	27	36	40	44	39	40	38	45	33	39	25	36	26	37	43	48	34	31	32	35	32	37	47	55	33	38
July 30–Aug. 5	16	25	28	32	35	36	34	43	40	40	42	45	36	39	44	37	37	36	50	48	36	32	36	35	41	38	72	56	39	39
Aug. 6–12	20	25	28	32	38	36	50	43	48	41	56	45	44	39	23	36	36	37	35	48	33	32	32	35	32	38	76	56	38	39
13–19	28	25	54	32	59	36	67	44	59	41	72	46	62	40	48	37	48	37	60	48	41	32	45	35	48	38	84	57	55	39
20–26	28	25	41	33	45	37	48	44	57	42	52	46	49	40	40	37	47	37	61	48	43	32	49	36	50	38	56	57	50	39
Aug. 27–Sept. 2	13	25	31	33	29	36	31	44	32	42	36	46	32	40	40	37	34	37	55	49	22	32	48	36	40	38	66	58	36	39
Sept. 3–9	30	25	42	33	44	37	52	44	47	42	53	46	48	40	48	37	41	37	62	49	30	32	46	36	45	38	73	58	47	39
10–16	33	25	44	33	44	37	58	45	52	42	56	46	51	41	50	38	39	37	43	49	39	32	39	36	42	38	51	58	47	40
17–23	18	25	22	33	40	37	33	44	38	42	27	46	32	40	34	38	29	37	31	48	36	32	41	37	34	38	28	57	33	39
24–30	31	25	26	33	30	37	30	44	35	42	38	46	32	40	20	37	24	37	39	48	31	32	28	36	28	38	41	57	30	39
Oct. 1–7	18	25	41	33	49	37	59	44	50	42	52	46	50	40	45	37	39	37	48	48	44	32	55	37	46	38	51	57	48	39
8–14	15	25	37	33	46	37	38	44	37	42	36	46	39	40	34	37	36	37	28	48	27	32	27	37	31	38	35	56	35	39
15–21	8	24	22	33	23	37	29	44	25	41	30	45	26	40	18	37	7	36	29	47	15	32	15	36	17	38	46	56	22	39
22–28	11	24	32	33	41	37	31	44	30	41	32	45	33	40	21	37	22	36	22	47	17	32	25	36	21	38	32	56	27	39
Oct. 29–Nov. 4	21	24	44	33	41	37	30	43	31	41	28	45	35	40	41	37	30	36	25	47	33	32	28	36	32	38	26	55	34	39
Nov. 5–11	14	24	14	33	25	37	45	43	34	41	38	45	31	40	35	37	28	36	54	47	42	32	38	36	30	38	41	55	35	39
12–18	8	24	8	32	18	37	29	43	15	41	24	44	19	39	14	36	15	36	11	46	26	32	26	36	18	37	26	54	19	38
19–25	5	24	16	32	17	37	15	43	20	41	17	44	17	39	25	36	16	35	37	46	29	32	24	36	26	37	16	54	22	38
Nov. 26–Dec. 2	12	23	22	32	23	36	18	43	22	40	21	44	21	39	29	36	22	35	26	46	29	32	27	35	27	37	23	53	24	38
Dec. 3–9	0	23	9	32	13	36	21	42	19	40	26	43	18	39	9	36	9	35	25	45	13	32	13	35	14	37	28	53	16	38
10–16	2	23	15	31	17	36	16	42	17	40	11	43	15	38	16	36	13	35	24	45	26	32	27	35	21	37	35	53	18	38
17–23	3	23	15	31	12	36	27	42	16	39	21	43	18	38	14	35	10	35	17	45	20	32	33	35	21	36	17	52	20	37
Dec. 24–Dec. 30	2	23	13	31	13	35	29	42	16	39	30	43	20	38	3	35	5	34	26	45	9	31	16	35	12	36	32	52	16	37